MUSIC THEORY IN MAMLUK CAIRO

For Ruth

Music Theory in Mamluk Cairo

The *ġāyat al-maṭlūb fī ‘ilm al-adwār wa-’l-ḍurūb*
by Ibn Kurr

OWEN WRIGHT
SOAS, University of London, UK

ASHGATE

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Chapter 1
Prelude

The work presented and examined here is the only theoretical text of any substance that can be considered representative of musicological discourse in Cairo during the first half of the fourteenth century CE. Indeed, nothing comparable survives from the whole Mamluk period, which extends from 1260 until the Ottoman invasion and conquest of Egypt in 1516. But its value does not derive merely from its fortuitous isolation: it is important, rather, because of the richness of the information it provides with regard to modal and rhythmic structures, and also because of the way in which the definitions it offers complement – and differ from – those set forth in an interrelated series of major theoretical works in both Arabic and Persian that span the period from the middle of the thirteenth century to the late fifteenth. In many respects these form a monolithic block: in particular, they remain internally consistent with regard to the theoretical armature they employ. They deal with rhythmic and (if only sporadically) formal structures, but concentrate above all on the analysis of intervals, tetrachord types, and theoretically possible scalar combinations thereof, and it is among these last that definitions of the great majority of the melodic modes they recognize are located. Given the broad continuities these treatises exhibit, and their differing places of origin, it has been assumed hitherto that they reflect an idiom practised and patronized at various courts spread over a vast geographical area, a unitary great tradition that, although inevitably subject to both continuing change and some degree of local variation, for long periods gives an impression of relative stability, maintaining a core set of common rhythmic, formal and modal structures. The existence of a treatise that in some ways provides a radically different account, despite being written towards the mid-point of the span covered by these texts, thus challenges this rather comfortable assumption and provokes second thoughts about the nature of the regional map, both with regard to the prevailing texture of theoretical discourse and, above all, the consistency of art-music practice and the structures underpinning it.

Pre-modern theoretical literature in Arabic – assuming, rather arbitrarily, that the modern period is ushered in by Mašāqa's *al-risāla al-šihābiyya* in the first half of the nineteenth century [1] – may conveniently be divided into two main periods of production, with a scatter of lesser contributions between and after. The first stretches from the first half of the ninth century to the first half of the eleventh, while the second covers the period mentioned above, from the mid thirteenth century nearly to the end of the fifteenth. As the first is dominated by the towering figure of al-Fārābī (d. 950), [2] flanked by al-Kindī (d. c. 867) [3] and Ibn Sīnā (d. 1037), [4] it is hardly surprising to find that it is to texts of this period that scholarly attention has primarily been devoted. The work of these great philosopher-theorists is characterized by its adoption and elaboration of various aspects of Greek thought, encompassing the twin legacies of the Pythagorean and Aristoxenian traditions, and it is perhaps their exploration of the domains of scale and tetrachord structure that has received most attention, [5] while latterly their methods of analysing rhythm have come into greater focus. [6] Scholarship has also recognized the importance of those writers, such as the tenth-century Iḫwān al-Ṣafā', [7] who follow al-Kindī in giving a prominent place to cosmological speculation, and has in addition attended to slightly later writers such as al-Ḥasan al-Kātib [8] and Ibn al-Ṭaḥḥān (d. after 1057), [9] whose work reflects more closely the categories and concepts of practising musicians and their audiences. In addition, considerable attention has been paid to quarrying the rich seams of information offered by more obviously literary texts that, together with historical and biographical works, provide an insight into the cultural world, especially that of the court, within which the more sophisticated musicians operated. Primary among these is the *kitāb al-aġānī* by al-Iṣbahānī (897–967), which is unrivalled in the extent and quality of its musical coverage, [10] and it is the lack of equally informative later writings that, taken together with the decline in theoretical writing after Ibn Sīnā and his pupil Ibn Zayla (d. 1048) [11] (or at least in the number and quality of works that survive), has served to make the middle of the eleventh century a seemingly natural cut-off point. Lip service may be paid to the Abbasid caliphate as a chronological entity ending in 1258, but the treatment of musical culture during its two final centuries has tended towards the perfunctory, affected partly by a rather simplistic notion of decline, but more by the relative paucity of sources from which some insight might be gained into the cultural variations resulting from the political complexities of this period. [12]

As far as scholarship is concerned, the resurgence in the production of theoretical treatises from the thirteenth century on – now in Persian and, later, Turkish as well as Arabic – is reflected in the attention paid to the edition, translation and evaluation of several of the most significant texts of this period. But our knowledge of the production and patronage of the type(s) of music to which these texts relate is at best uneven, and usually sketchy in the extreme, especially given the much greater geographical spread implied by the languages used, for whereas the writers of the early period lived mainly in or near Iraq, and the rich social documentation in the *kitāb al-aġānī* is above all a window onto musical behaviour in Baghdad at and around the early Abbasid court, we are now confronted with theorists variously based in Iraq, Anatolia, Western Persia and Khorasan, while remaining without any portrayal of musical life at one of the principal courts in this vast area comparable in range and diversity to that presented by the *kitāb al-aġānī*. [13] It is thus hardly surprising that it has not yet been possible to produce for this period a detailed historical account of patronage, personalities and trends of the same scope as Farmer's survey of the preceding one. [14] But even if the social aspects are disregarded, it is still fair to say that research on the output of the thirteenth to fifteenth centuries has been rather lop-sided: it has tended to concentrate on those theorists whose work can be regarded as a continuation and development of aspects of the scientific enterprise carried out by al-Fārābī and Ibn Sīnā. In other words, attention has been focused on writings belonging to what has conventionally been termed the Systematist school, [15] and it is only recently that representative texts from outside that tradition, such as the corpus of fifteenth-century Turkish treatises, have begun to receive serious scholarly attention. [16]

Systematist texts

The series of treatises that constitute the Systematist corpus begins with a highly influential foundation text, the *kitāb al-adwār* ('Book of Cycles') of Ṣafī al-Dīn b. Fāḫir al-Urmawī (d. 1294) (henceforth al-Urmawī), written probably about 1250, [17] when he was active in Baghdad at the court of the last Abbasid caliph, al-Mustaʿṣim (1242–58). An earlier and significantly different version of this work survives but, however interesting for what it tells us about the development of al-Urmawī's thinking, it is never cited by later theorists, who were doubtless unaware of its existence. [18] As any theoretical developments that he may have derived from immediately antecedent texts are unknown, no such texts having survived, the *kitāb al-adwār* presents what appears as a highly innovative account of the modal and rhythmic language of the day; it was certainly one sufficiently persuasive in its analytical cogency and neatness to become normative, being adopted by most of the major theorists of the following two centuries. The rhythms are presented in circular format, consonant with the title of the work, with a specification of their internal patterns of attacks, while precise descriptions are given of the intervallic structures of two sets of modes, the more important consisting of 12 modes termed *šudūd*, [19] the other of six termed *āwāzāt*. [20]

After the sack of Baghdad by Hülegü in 1258 and the termination of the Abbasid caliphate, Iraq was absorbed into the Ilkhanid segment of the Mongol empire and al-Urmawī entered the service of Hülegü's vizir, Šams al-Dīn al-Juwaynī, as tutor to his sons, dedicating to one of them, Šaraf al-Dīn Hārūn, his second and more extensive treatise, the *risāla al-šarafiyya*, probably written in 1267. [21] This was followed around 1300 by the first great Persian Systematist text, the magisterial chapter on music in the *durrat al-tāj*, an encyclopaedia by Quṭb al-Dīn Šīrāzī (d. 1311) [22] (henceforth Šīrāzī), with a further major contribution being added in the fourteenth century (the Mubārakšāh commentary on the *kitāb al-adwār* of c. 1375) [23] and others in the fifteenth, for example the various treatises of Marāġī (d. 1435) [24] and al-Lāḏiqī (d. 1495). [25]

East and west

Insofar as al-Urmawī's treatises reflect practice, it must be assumed to be that of the art-music tradition of Baghdad and also, presumably, of major urban centres close to it. The evidence of Šīrāzī, who grew up in Shiraz and spent the latter part of his life in Tabriz, confirms that at the beginning of the fourteenth century the same idiom predominated in western Iran, and such was probably the case in Khorasan also, although it has been argued, on the basis of a lack of congruity in nomenclature, that there was at least some degree of difference at this stage between these two major regions. [26] But several of the later Systematist texts, insofar as they can meaningfully be tied to a particular geographical location, come from Khorasan, and indeed from its northern and eastern fringes. Thus after the Mubārakšāh commentary, dedicated to Šāh Šujā', ruler of Fārs and Kurdistan from 1358 to 1384, the next major works, the treatises of Marāġī, dating from the first decade of the fifteenth century, were written in Samarkand, and later ones come from authors active in Herat, [27] while Anatolia also makes a brief, hesitant appearance on the map. [28] From the vantage point of its first articulation in Baghdad, therefore, the general impression given by the Systematist corpus is of a constant shift eastwards and northwards, to western Persia, and thence to what is now termed Central Asia, and possibly also to Anatolia.

As there is a singular lack of comparable Systematist treatises written in, say, Syria or Egypt, or even, indeed, in Iraq after al-Urmawī, we are less well informed about the art-music norms prevalent there. Indeed, the nature of the geographical spread of the surviving Systematist corpus does not allow the sure conclusion that the range of modal and formal structures and concepts it presents were also the standard models in the major cities of the eastern Arab world, so that for evidence that might help clarify matters we need to turn elsewhere. The question may be formulated quite simply: what information do we have that might indicate whether the art-music idiom favoured in Mamluk domains (Cairo and Damascus above all) was identical with, or at least closely resembled, that known in Baghdad and further east, rather than being recognizably different, even possibly preserving vestigial links to the style world of North Africa?

The extant sources are unfortunately sparse, and need to be approached with caution; and although certainly worth investigating, they present what is essentially background material, and fail to provide a clear answer. The first relevant witness is Ibn al-Ṭaḥḥān, a professional musician at the Fatimid court in Cairo during the middle of the eleventh century, and while his remarks are too early for any conclusions to be drawn from them about the state of affairs in the thirteenth and fourteenth centuries, they serve as a useful starting point nonetheless, as they reveal a clear awareness of differences between local and, especially, Persian practice. Ibn al-Ṭaḥḥān refers in particular to performance techniques and pitch discriminations used by Persian musicians that were not standard features of Cairo practice. [29] On the other hand, his remarks on musicians from Baghdad concern only their mannerisms, [30] and when trying to track down information about a particular rhythmic cycle it is musicians from Egypt, Syria and Iraq that he consults. [31] The implication, therefore, is of a common art-music idiom in the eastern Arab world, but one in some degree different from Persian norms.

Ibn al-Ṭaḥḥān has nothing to say about North Africa, but that musical contacts were still maintained late in the twelfth century is suggested by the evidence of Ibn Sanā' al-Mulk (d. 1212), who was learning *muwaššaḥāt* from Maghribi informants. [32] In the early thirteenth century, on the other hand, it is definitely mentioned as possessing a distinct tradition by a later authority, an older contemporary of al-Urmawī, Aḥmad b. Yūsuf al-Tīfāšī (d. 1253), who was himself from North Africa but both studied in the east and spent the latter part of his life there, first near Mosul and then in Cairo. He draws for us a style map in which al-Andalus and most of North Africa form one block and the Arab east another, with Ifrīqiyā, equivalent to modern Tunisia, transitional between them: Egypt, it is clearly implied, belongs to the eastern block. [33] As a general characterization, he regards the west as more conservative, with a more complex melodic style, while in the east the older modal tradition had been supplanted by Persian imports, and although the names he lists differ in certain respects from those cited by al-Urmawī for the 12 *šudūd* modes, there is sufficient congruence to make it clear that we are dealing with what is essentially the same set. [34] This is evidently a highly schematic and reductive account, and given the reference to complexity of style he may have had in mind the idiom of highly-trained performers of the art-music tradition, rather than the simpler melodies of the *muwaššaḥāt*, which no doubt continued to circulate. But its emphasis is clear: for al-Tīfāšī, Cairo practice has been so deeply influenced by eastern models that the older style has been effaced.

A century later we come to Šihāb al-Dīn Aḥmad b. Yaḥyā b. Faḍlallāh al-'Umarī (1301–49) (henceforth al-'Umarī), who lived in both Egypt and Syria, and is the one author of the period to provide information about the repertoire of Cairo and Damascus. In his vast compendium referred to here as *masālik al-abṣār* (the full title being *masālik al-abṣār fī mamālik al-amṣār*, which might be playfully rendered, aping its conventional internal rhyme, as 'What the Eye Relates of Sovereign States'), we find that the introduction to volume 10, which deals with the biographies of musicians,[35] also discusses the replacement of an older, Arabic modal nomenclature by a recently-imported one that is predominantly Persian, the new terms again being those found in the *kitāb al-adwār*, and he even supplies equivalences between them, so that in place of, for example, the older Arabic *muṭlaq* and *maḥmūl* we now have the Persian *rāst* and *zīlafkand*.[36] This appears, then, to be a replay of the process described by al-Tīfāšī, with the implication that the replacement took place rather more gradually, only having being recently completed at the time of writing, and pointing, therefore, towards the first quarter of the fourteenth century as the period by which the change was definitively completed. More important, however, is al-ʻUmarī's insistence that the substitution is a change of terminology, not of substance[37] (possibly, then, one to be interpreted as no more than a modish linguistic snobbery), and as it is reasonable to argue that a name would not be applied arbitrarily in Cairo to a modal structure quite unrelated to the one known by the same name in Baghdad, this evidence would appear to point to a measure of uniformity over time as well, the implied earlier existence of common or at least fairly similar modal structures disguised by different labels running counter to al-Tīfāšī's claim of sweeping change. When al-ʻUmarī seeks specialist opinion about these changes in nomenclature, however, the experts he consults are not local musicians but rather ones from Transoxiana,[38] which would appear to suggest the existence of a broadly uniform art-music modal idiom in use from Cairo to Samarkand. But since, in that case, local musicians should have been able to serve just as well, there is the further implication that particular prestige attached to eastern authorities, possibly because of what was viewed to be their greater expertise. Accordingly, a slightly different emphasis could be placed on the introduction of the new mode names, suggesting that it was not just a capricious and hence inexplicable matter of fashion but one influenced by an appreciation of superior musicianship.

In any event, the additional, if occasional, scraps of literary evidence, which deserve to be taken seriously as disinterested sources, support an earlier rather than later introduction of the Persian mode names. One would expect them to have become current beyond musicological circles later in the fourteenth century, as in a satirical verse quoted by al-Ġuzūlī (d. 1412), where two of the mode names, *ʻirāq* and *iṣfahān*, are also to be understood as geographical terms:

qultu iḏ ġannā ʻirāqan *laytanā fī iṣfahānī*
When he sang in *ʻirāq* I said ʻif only we were in Isfahan'[39]

but what is decisive is the occurrence of the same names a century earlier in the three shadow-plays by Ibn Dāniyāl (d. 1310–11),[40] each one beginning with a song for which the mode is specified: *rāst, ʻirāq* and *iṣbahān*. The texts of these plays, which mix high and low registers along with their scurrilous and scatological content, were certainly meant to be understood by the populace at large, so that the references cannot have been esoteric: they indicate that these names were by then not just items of specialist jargon but were well established as part of popular cultural knowledge. Equally, the omission of the earlier Arabic names from such sources suggests that they were already defunct, and that in all probability the process of terminological substitution referred to by al-ʻUmarī had already been completed some time before the end of the thirteenth century (which lends his search for equivalences the air of an antiquarian pursuit).

When we turn from modes to rhythms, a rather clearer and more straightforward picture might be anticipated, for whereas al-Urmawī nowhere hints at regional differences with regard to the modes, he is quite specific in stating that, with one exception, the rhythmic cycles he describes are those favoured by Arab musicians, while Persians have other preferences.[41] On the assumption that they were not just a local phenomenon confined to Baghdad, it would be reasonable to conclude that they would also have been familiar further to the west, Cairo probably included. What complicates matters here, though, is that this reading of the ethnic-geographical divide implied by al-Urmawī's remarks falters somewhat when account is taken of the rhythmic nomenclature used by al-ʻUmarī, for rather than being confined to the cycles listed by al-Urmawī, he cites songs in a rhythmic cycle called *turkī* (a cycle with this name had earlier been described by Šīrāzī, but not by al-Urmawī),[42] while two other cycles are qualified as *ḫurāsānī*,[43] a term known to neither al-Urmawī nor Šīrāzī. In the early fourteenth-century Cairo repertoire as reflected by al-ʻUmarī, *al-ṯaqīl al-ḫurāsānī* is, in fact, the most common designation, whereas cycles described in the *kitāb al-adwār* such as *ramal* and *hazaj* receive scant mention. While it is doubtless to be expected that certain developments would have taken place during the intervening period of approximately half a century, this documentation appears to imply a transformation difficult to explain away as no more than the natural result of gradual incremental change. Yet alongside regional variation with regard to the cycles themselves, account also has to be taken of the possibility of something as simple as local preferences in nomenclature, and evidence for this may be found in al-ʻUmarī's references to pieces by or transmitted by al-Urmawī, the rhythmic cycle of which is stated to be *al-ṯaqīl al-ḫurāsānī*.[44]

A further complication arises in relation to the diffusion of al-Urmawī's compositions, and hence of the style they represented. There is some evidence that the repertoire with which he was familiar, and to which he himself made a significant contribution as a composer, was to become known further west in the Arab world, and in particular in Syria and Egypt: we are informed that among the musicians dispersed by the Mongol sack of Baghdad were pupils of his (or pupils of theirs) who travelled westwards to Syria and Egypt.[45] One of them, indeed, al-Kutayla (alive in 1330), who had many of al-Urmawī's compositions in his repertoire, was engaged to teach the singing girls of the Mamluk ruler al-Nāṣir (who reigned, with gaps, from 1293 to 1341).[46] But such reports still allow for a considerable latitude of interpretation: could it be that these musicians were well received not because they were superior performers of the idiom also cultivated by their Cairo contemporaries, but because they came with a particular reputation based upon the presumed excellence of Baghdad practice, and because the compositions of al-Urmawī that they performed were similarly surrounded by a particular aura? If so, it would be perfectly possible for them to be using a modal and rhythmic idiom containing features unfamiliar to Cairo audiences, but one sufficiently prestigious for its more unusual aspects to be tolerated and then accepted and integrated alongside local norms, eventually even displacing some of these. However, it should not be expected that a composition by al-Urmawī possibly dating back to the middle of the thirteenth century would still be performed in the same way 70 or 80 years later: transmitted by pupils of his pupils,[47] they would doubtless have been adjusted to the stylistic norms of the day, and it is equally possible that these would have been influenced by the local preferences of the area to which these itinerant musicians had gone. Systematist texts, though, are of no help here: it is intriguing to note that Šīrāzī spent some time in Cairo in the 1380s on diplomatic missions,[48] but however magisterial his account of modal practice, including variations of nomenclature, it contains no reference to regional differences, and certainly not to Cairo practice as in any way distinct from the idiom with which he was familiar.

Non-Systematist texts

Whatever processes of change were affecting modal and rhythmic structures are likely to have been gradual, and evidence to substantiate them, let alone to estimate their rate and extent, is hard to find. Apart from occasional later pointers to regional preferences in nomenclature,[49] Systematist texts are silent upon such matters,[50] and the literary, historical and biographical texts cited above provide us with material that is open to various interpretations, none, it might be claimed, immediately compelling. At this point, therefore, we need to turn to whatever may be gleaned from Arabic theoretical texts that stand outside the Systematist canon. It has to be said, though, that if Western scholarly attention has tended to concentrate on the Systematists to the detriment of these other texts it is for cogent reasons: set against the combination of intellectual sophistication and precise factual content that characterizes the more substantial Systematist treatises, they are simply less – and sometimes only minimally – informative: they generally avoid theoretical elaboration and restrict themselves to tabulating modes. In short, they tend to name rather than define or describe, and are consequently opaque and difficult to evaluate; further, in some cases they are either by unknown authors or are anonymous, and thus impossible to date and place with any accuracy and thus hard to contextualize.

Typologically we may distinguish among them between verse and prose texts, the former consisting of didactic expositions of modal categories and their cosmological affiliations. They are significant in that they demonstrate the continuing centrality of cosmological thought, and are thus a useful corrective supplement to Systematist texts, which tend to give less attention to this aspect or even ignore it completely.[51] But it is by no means clear whether the particular modal groupings that have a stable cosmological underpinning and are consequently foregrounded in these texts actually represent categories that were of sufficient importance to practising musicians to affect the performance choices they made, still less whether the modes that traditionally belonged to these groupings all continued to be commonly employed: to investigate this, information has to be sought elsewhere. Rather less equivocal in the latter regard are the prose texts, especially those in which cosmology is a less dominant theme, and where they refer to or describe modal structures that stand outside the traditional cosmologically geared groups of the 12 *šudūd* and six *āwāzāt* modes we can have greater confidence in their contemporary relevance – always assuming that their date can be ascertained with any degree of accuracy. One or two texts of this type have been edited and studied, but as they are difficult to place geographically as well as chronologically the relationship of the accounts they give to those of the Systematist canon still awaits evaluation.[52]

There are, in contrast, two texts, one of which is in verse, precisely datable to the second quarter of the fourteenth century, that is, to within some 30 to 40 years of the composition of Šīrāzī's chapter on music in the *durrat al-tāj*. The verse text, the *urjūzat al-anġām* ('*Rajaz*-metre Poem on the Modes'), written in 729/1328–9 by Badr al-Dīn Muḥammad b. 'Alī al-Ḫaṭīb al-Irbilī (henceforth al-Irbilī),[53] not only recognizes different ways of categorizing the modal corpus but also, intriguingly, includes one or two mode names absent from al-Urmawī's and Šīrāzī's accounts and also from those of later Systematist theorists, suggesting therefore at least some small degree of regional specificity. The prose text, far more extensive and informative, is the hitherto unedited and generally neglected work to be presented here, one which survives, so far as is known, in a single manuscript now in the British Library. Described more fully in Chapter 8, it probably dates to the fourteenth century, and despite coming from the pen of a somewhat slipshod scribe is a generally sound copy. The treatise it contains is concerned, exceptionally, not just to name but to describe within a particular theoretical framework. Its title, *ġāyat al-maṭlūb fī 'ilm al-anġām wa-'l-ḍurūb* (henceforth referred to simply as *ġāyat al-maṭlūb*), might be loosely rendered as 'The Enticing Roads to Rhythms and Modes', and it is, indeed, to a fairly detailed account of the rhythmic cycles and modes in current use that it is devoted. Accordingly, if one disregards the absence of the extensive and sometimes complicated analytical component so characteristic of Systematist treatises (the specification of interval sizes and tetrachord structures, and the tabulation of octave species and their transpositions), its contents provide a close match to those of the *kitāb al-adwār* and can be compared directly with them; in some respects, indeed, they are even richer.

Ibn Kurr

The *ġāyat al-maṭlūb* was written by Abū 'Abdallāh Šams al-Dīn Muḥammad b. 'Īsā b. Ḥasan b. Kurr al-Baġdādī (henceforth Ibn Kurr), and despite the final element of his name it reflects the perceptions not of musicians in Baghdad but of those in Cairo: the misleading al-Baġdādī belongs to his father, by a nice irony not only a contemporary of al-Urmawī but one who lived alongside him in the same city. But whereas al-Urmawī stayed on in Baghdad when Hülegü conquered it in 1258, Ibn Kurr's father fled, and settled in Cairo. It was there that Ibn Kurr was born, in 1282, and there that he died, in 1357,[54] so that the *ġāyat al-maṭlūb* can reasonably be said to reflect the state of affairs in Cairo during the first half of the fourteenth century. The precise date of its composition is unknown, but there is a reference to it by a personal acquaintance, al-Ṣafadī (1297–1363), demonstrating that at least some of it was already in existence in 1344,[55] and there is a further contemporary witness to Ibn Kurr himself, the eminent scholar al-'Umarī, who also knew him personally and indeed devotes to him the very last of the series of entries on musicians in volume 10 of the *masālik al-abṣār*.[56] Unfortunately, whereas al-'Umarī is content to reproduce the supple prose of his earlier sources, his own notices are for the most part couched in rhyming prose, a by then fashionable linguistic device that unfortunately tends to privilege style over content, so that what he conveys is frequently not very informative. Nevertheless, it is significant that his entry on Ibn Kurr begins by citing his unparalleled knowledge of the science of music, for with other musical figures who were also expert in fields that had greater prestige within Islamic culture, these are mentioned first. The entry on Suhrawardī,[57] for example, mentions expertise in Arabic (including memorizing al-Ḥarīrī's *maqāmāt* as well as the Qur'ān), but dwells principally on his prowess as a calligrapher before citing his teachers in *ḥadīṯ*, giving a character sketch, and then, finally, reaching music. The rather briefer notice on Ibn Kurr by al-Ṣafadī has the same unusual emphasis, his pre-eminence in music being mentioned first, but unlike al-'Umarī, who only makes a passing reference to him residing at a Sufi lodge (*zāwiya*) near the shrine of al-Ḥusayn, al-Ṣafadī goes on to mention that in addition to the Qur'ān, he committed to memory works on grammar and the religious sciences. In similar vein, the later historian Ibn Taġrībirdī (1410–70) certainly mentions Ibn Kurr's pre-eminence in music, but gives a prominent place to the religious side: in addition to being a Sufi (again associated with the *zāwiya* attached to the shrine of al-Ḥusayn) he is given the title of *šayḫ* and *imām*, and is said to have studied Qur’ān, *ḥadīṯ* and *fiqh*.[58]

Possibly echoing Ibn Kurr’s own text, al-‘Umarī (and similarly al-Ṣafadī) later expands on the theme of his musical learning by stating that he found al-Fārābī to be in error, although we are not told in relation to which particular feature of the theory of music, and that the scholars of the day were reluctantly obliged to concede that his strictures were justified. Whatever the facts of the matter, the motivation behind this passage is clear, and al-‘Umarī also introduces various fanciful and in any case wholly unverifiable claims to his excellence in performance: Ibn Kurr is said to have transmitted the styles of both Isḥāq al-Mawṣilī and Ibrāhīm b. al-Mahdī, two prominent early Abbasid musicians who represented rival tendencies, the implication thus being of wide-ranging mastery, both in the sense of technical command and in something even more prestigious, a profound knowledge of ancient traditions; and this is reinforced by the absurd assertion that he commanded the whole repertoire of songs – one by now four to five centuries old – mentioned in al-Iṣbahānī’s voluminous *kitāb al-aġānī*.[59] The ‘emulation of the ancients’ topos is then underlined once more by al-‘Umarī’s claim that he himself had witnessed Ibn Kurr re-enact the anecdote according to which al-Fārābī caused his audience successively to laugh, cry and fall asleep. A further kind of status, that of social and religious respectability, is affirmed by indicating that he was not actually a professional musician, a point that may be linked to an earlier reference to his being of independent means, having inherited a salary awarded to his father. Finally, al-‘Umarī refers to Ibn Kurr the composer by citing one or two of his settings of verse by al-‘Umarī himself, and confirms the personal connection that this implies by characterizing him as an engaging personality who, despite the nearly 20 years difference in their ages, was a personal friend.[60]

By this period, writings that deal with musicians as social beings are hardly ever concerned with the contemporary: al-‘Umarī’s account is thus quite exceptional, and it is hardly surprising to find that the references to Ibn Kurr that surface in later works fail to add to our knowledge, being essentially parasitic abbreviations. One, though, supplies as an index of his musical mastery an anecdote according to which he was able, on encountering a group of people (*qawm*) singing, to make his mule step in time to the music.[61]

The *ġāyat al-maṭlūb fī ‘ilm al-anġām wa-’l-ḍurūb*

Despite the radical differences between them, Ibn Kurr’s treatise can justifiably be compared with the *kitāb al-adwār* not merely because of the topics it deals with but because it, too, appears to provide an individual approach and a novel set of definitions. Both are unprecedented in the sense that they are without direct antecedents, but whereas the *kitāb al-adwār* is endlessly quoted in later works, the *ġāyat al-maṭlūb* was to remain without successor texts to elaborate, comment on (or challenge) its account, and thereby elucidate it. Both texts are also akin in what they omit: neither is concerned with musicians or musical behaviour; neither mentions origins or cosmological associations; and both ignore instruments completely: they concentrate on modes and rhythmic cycles. There is, though, no mention of al-Urmawī in the *ġāyat al-maṭlūb*, and signally absent from it are any of the precise definitions of pitch relationships underpinning the analysis of species and scales that is such a prominent feature of the *kitāb al-adwār*. In fact, the one detail Ibn Kurr mentions that is derived – no doubt indirectly – from Systematist theory demonstrates general ignorance of it.[62] His awareness of other views is revealed only through his complaints about what he considers obscure and problematic Persian notions, and especially through his directly confrontational approach to Persian modal taxonomy: although he uses without demur the imported mode names to which al-Tīfāšī and al-‘Umarī had referred, he objects to the ways in which the modes are classified and, especially, to the ways they are held to be derived from each other.

Ibn Kurr’s own descriptive framework is starkly different to that of the Systematists, and raises a number of fundamental questions about analytical criteria. That there is no trace of the definition of intervals by ratios or string divisions in this treatise is not in itself important, and certainly does not relegate the *ġāyat al-maṭlūb* to an inferior status. We are dealing with a work written not by a philosopher or theorist with mathematical inclinations but by a practitioner writing for a readership sufficiently well informed for certain basics to be taken for granted. The major points of interest (and, in relation to the *kitāb al-adwār*, difference) thus include the particular terms used and the theoretical framework within which the material is presented, however tersely or elliptically, as well as the repertoire of modes and rhythmic cycles discussed, the way they are classified, and the nature of the definitions given. Indeed, the resulting accounts of rhythmic and modal structures provide, at first sight, so radical a contrast to their Systematist counterparts that had this treatise been anonymous and of unknown provenance one might have wished to assign it to a later period, especially when it presents a repertoire of rhythmic cycles distinctly at odds with al-Urmawī’s, which is explicitly stated to consist of cycles familiar to an Arab musician. However, these are problems to be confronted, not evaded by chronological displacement: the text clearly names its author, about whom we have reliable biographical information, and its status as a text of the first half of the fourteenth century is not in doubt. Its apparent distance from the Systematist school thus not only provides another perspective on intellectual history and the locus of theoretical frameworks but also, and rather more pressingly, raises interesting questions about the extent of regional variation, difficult to grasp from the rather monolithic Systematist accounts. In addition, and even more radically, Ibn Kurr’s account challenges both the comprehensiveness of the presentation of the rhythmic cycles familiar from al-Urmawī and even the validity of his modal definitions, however normative they were considered to be by the several later theorists who repeated them and commented on them.

[1] Miḫāʼīl Mašāqa, *al-risāla al-šihābiyya fī al-ṣināʻa al-mūsīqiyya*, in *al-mašriq*, 2 (1899), ed. Ī. Fatḥ Allāh (Cairo, 1996), Ronzevalle 1913: pp. 1–120, tr. in Smith 1847: pp. 171–217.

[2] *kitāb al-mūsīqī al-kabīr*, ed. Ġ. ‘A. al-M. Ḫašaba; rev. and intro. M.A. al-Ḥifnī (Cairo, 1967), tr. in D’Erlanger 1930 and 1935. For his treatises on rhythm see Neubauer 1998, Sawa 2009.

[3] *mu’allafāt al-kindī al-mūsīqiyya*, ed. Z. Yūsuf (Baghdad, 1962).

[4] *kitāb al-šifā’, al-riyāḍiyyāt*, 3: *jawāmi‘ ‘ilm al-mūsīqī*, ed. Z. Yūsuf (Cairo, 1956). Text and Turkish tr. in İbn Sînâ, *Mûsikî*, tr. A.H. Turabi (Istanbul, 2004), tr. in D’Erlanger 1935: pp. 103–245.

[5] Among the earlier studies mention may be made of Beichert 1931 and Husmann 1961, with the most recent and ambitious being Beyhom 2010.

[6] Neubauer 1998, Sawa 1989 and 2009.

[7] *risāla fī al-mūsīqī*, tr. in Shiloah 1965 and 1967, and Wright 2010.

[8] al-Ḥasan b. Aḥmad b. ‘Alī al-Kātib, *kamāl adab al-ġinā’*, ed. Ġ. ‘A. al-M. Ḫašaba (Cairo, 1975); ed. Z. Yūsuf, *al-mawrid*, 2/2 (1973): pp. 101–54; tr. in Shiloah 1972.

[9] Ibn al-Ṭaḥḥān al-Mūsīqī, *ḥāwī al-funūn wa-salwat al-maḥzūn*, facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 52 (Frankfurt, 1990). See also Wright 1999.

[10] See Sawa 1989, also Kilpatrick 2003.

[11] Abū Manṣūr b. Zayla, *al-kāfī fī al-mūsīqī*, ed. Z. Yūsuf (Cairo, 1964).

[12] The relative poverty of later sources is apparent in Farmer 1929, where the final two centuries of the Abbasid caliphate receive relatively short shrift.

[13] As a partial exception one might cite early fifteenth-century Herat. See Subtelny 1984.

[14] The best account is Neubauer 1997. There is also a useful bio-bibliographical survey in al-Rajab 1982.

[15] Manik 1969, Wright 1978.

[16] See *Seydī’s Book on Music: A 15th Century Turkish Discourse*, translated, annotated and edited by E. Popescu-Judetz in collaboration with E. Neubauer, The Science of Music in Islam, 6 (Frankfurt am Main, 2004).

[17] *kitāb al-adwār*, ed. H.M. al-Rajab (Baghdad, 1980); ed. Ġ. ‘A. al-M. Ḫašaba and M.A. al-Ḥifnī (Cairo, 1986); facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 29 (Frankfurt, 1986); tr. in D’Erlanger 1938: pp. 185–565.

[18] See Wright 1995, where the argument proposed for a significantly earlier date for the *kitāb al-adwār* is not sustainable: it depended upon the date in the colophon of MS Nuruosmaniye 3653, but it has been demonstrated in Mohammedi 2001 that this is the result of tampering; accordingly, see *Encylopaedia of Islam*, 2nd edition, s.v. Ṣafī al-Dīn al-Urmawī (E. Neubauer) for more reliable biographical information.

[19] Pl. of *šadd* (‘tensioning, tightening’), to be taken as a general metaphor for the pitch differences involved rather than a specific reference to a particular tuning, even though it may have originated from the tying on of frets.

[20] An Arabic pl. of the Persian *āvāza* (‘voice, sound’).

[21] *al-risāla al-šarafiyya*, ed. H.M. al-Rajab (Baghdad, 1982); ed. F. Arslan, with Turkish tr., *Safiyyüddîn-i Urmevî ve Şerefiyye Risâlesi* (Ankara, 2007); facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 29 (Frankfurt, 1986); tr. in D’Erlanger 1938: pp. 3–182. Other dates suggested are 1262 and 1268.

[22] Quṭb al-Dīn Šīrāzī, *durrat al-tāj*, ed. S.M. Maškūt and N.A. Taqwā (Tehran, 1939–46). One date that has been proposed for the *durrat al-tāj* is 705/1305–6.

[23] *šarḥ mawlānā mubārakšāh bar adwār*, MS British Library Or. 2361, fols 68b–153, tr. in D’Erlanger 1938: pp. 185–565.

[24] ‘Abd al-Qādir Marāġī, *jāmi‘ al-alḥān*, ed. Taqī Bīniš (Tehran, 1987), *maqāṣid al-alḥān*, ed. Taqī Bīniš (majmū‘a-yi mutūn-i fārsī) (Tehran, 1966, 2nd ed. 1977), *al-fawā’id al-‘ašr*, MS Nuruosmaniye 3651, fols 68v–119v, *šarḥ al-adwār (bā matn-i adwār wa-zawā’id al-fawā’id)*, ed. Taqī Bīniš (Tehran, 1370š/1991).

[25] Muḥammad b. ‘Abd al-Ḥamīd al-Lāḏiqī, *al-risāla al-fatḥiyya*, MS British Library Or. 6629, tr. in D’Erlanger 1939: pp. 259–498, *zayn al-alḥān fī ‘ilm al-ta’līf wa-’l-awzān*, MS Nuruosmaniye 3655.

[26] See Pūrjawādī 1995 and Dzhumajev 1992.

[27] ‘Abd al-Raḥmān Jāmī (d. 898/1492), *risāla-yi mūsīqī*, facsimile and tr. by A.N. Boldirev (Tashkent, 1960), ‘Alī b. Muḥammad Banā’ī (d. 1513), *risāla dar mūsīqī*, facsimile (Tehran, 1368š/1990), ‘Alī šāh b. Būka Awbahī (second half of the fifteenth century), *muqaddima-yi uṣūl*, MS İstanbul Üniversitesi Kütüphanesi F 1079.

[28] Fatḥ Allāh al-Mu’min al-Širwānī (d. c. 1453), *majalla fī al-mūsīqī*: first version MS Topkapı Ahmet III 3449, facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 29 (Frankfurt, 1986); second version MS British Library Or. 2361, fols 168b–219b, tr. in D’Erlanger 1939: pp. 3–255. However, this work may reflect the author’s earlier background in Samarkand, rather than current conditions in Kastamonu, where it was probably written, and it certainly contrasts with contemporary non-Systematist treatises from Anatolia written in Turkish.

[29] *ḥāwī al-funūn*, pp. 175, 204.

[30] *ḥāwī al-funūn*, p. 61.

[31] *ḥāwī al-funūn*, p. 206.

[32] See Reynolds 2006.

[33] See al-Ṭanjī 1968.

[34] They have eight names in common, while two more of those listed by al-Urmawī (*abūsalīk* and *zīrafgand*) appear in compounds listed by al-Tīfāšī (*māya abūsalīk* and *zīrafgand buzurg*). The second set, the six *āwāzāt*, are not mentioned by al-Tīfāšī, but neither are they cited in the surviving early draft of the *kitāb al-adwār* (see Wright 1995).

[35] Facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 46, 10 (Frankfurt, 1988).

[36] The details referred to here are on pp. 2–3. Few Persian mode names survive unscathed in Arabic texts of the period: *zīlafkand* is an Arabicized form of *zīrafgand*. These are the names, according to al-‘Umarī, known ‘in our day’, and attributed by him to contemporary or recent, rather than ancient, Persians (*al-muta’aḫḫirūn min al-furs*).

[37] *fī al-asmā’ lā fī al-musammayāt* (‘in the names, not in what they designate’), p. 2.

[38] Ibid.

[39] *maṭāli‘ al-budūr fī manāzil al-surūr*, 1 (n.p., 1299/1882), p. 237.

[40] *Three Shadow Plays* (Cambridge, 1992).

[41] *kitāb al-adwār* (references throughout will be to the edition by H.M. al-Rajab), pp. 143, 153.

[42] See Neubauer 2008–9.

[43] *masālik al-abṣār*, vol. 10, pp. 354 et seq. has *al-ṯaqīl al-ḫurāsānī*, p. 355 has *al-ḫafīf al-ḫurāsānī*.

[44] *masālik al-abṣār*, vol. 10, pp. 354–5.

[45] e.g. Niẓām al-Dīn b. al-Ḥakīm (*masālik al-abṣār*, vol. 10, p. 361).

[46] *masālik al-abṣār*, vol. 10, p. 332 (cf. Neubauer 1997: pp. 323–4).

[47] cf. Neubauer 1997: pp. 324–5.

[48] See *Encyclopaedia of Islam*, 2nd edition, s.v. Kuṭb al-Dīn Shīrāzī (E. Wiedemann).

[49] Such as al-Širwānī's statement (*majalla*, p. 108) that *iṣfahān* is called *muḫālif* in Iraq.

[50] It is not until al-Lāḏiqī, late in the fifteenth century, that we find a systematic distinction between older and contemporary forms.

[51] The major exception, perhaps not surprisingly, is the last major Systematist theorist, al-Lāḏiqī, who relates the 12 *šudūd* to the signs of the zodiac and to the four elements (D'Erlanger 1939: pp. 429–37), and the (now seven) *āwāzāt* to the heavenly bodies (planets, sun, moon) and the elements (ibid.: pp. 437–40).

[52] Indicative of the problems involved is *al-durr al-naẓīm*, attributed to Šams al-Dīn Muḥammad b. Ibrāhīm al-Akfānī (d. 1348), for the two texts purporting to be of this work presented in Shiloah 1968 are sufficiently different to raise doubts about authorship, and hence about their chronology. The most useful introduction to this complex area is to be found in Neubauer 1999–2000.

[53] Published in *al-mašriq*, 16 (1913): pp. 895–901; al-ʻAzzāwī 1951: pp. 103–13.

[54] Or, according to other authorities, 1361 (al-Rajab 1982: p. 49).

[55] In his notice on Ibn Kurr (Ṣalāḥ al-Dīn Ḫalīl b. Aybak al-Ṣafadī, *al-wāfī bi-'l-wafayāt*, vol. 4, ed. S. Dedering [Wiesbaden, 1959], pp. 305–6), he says that he heard the introduction from him at his home (*samiʻtu muqaddimatah minh bi-manzilih*) in the month of *šawwāl*, 745/1344.

[56] pp. 420–2 (and on p. 419 al-ʻUmarī quotes him as his source for his account of Abū ʻAbdallāh al-Zarkašī).

[57] *masālik al-abṣār*, vol. 10, pp. 347–51.

[58] *al-nujūm al-zāhira fī mulūk miṣr wa-'l-qāhira*, vol. 10 (Cairo n.d.), pp. 330–3.

[59] On which see Sawa 1989.

[60] A friendship that must have been forged well before al-ʻUmarī's departure, in 1339, for Damascus, where he was to spend the rest of his life.

[61] Aḥmad b. Ḥajar al-ʻAsqalānī, *al-durar al-kāmina fī aʻyān al-miʼa al-ṯāmina*, ed. M.S. Jād al-Ḥaqq, vol. 4 (Cairo, [1967]), p. 245.

[62] He projects the notion of a 17-note grouping (the Systematist octave scale) onto his own very different layout, so that it produces a unit spanning four tetrachords that is designated as *sāz*.

Chapter 2
Introduction

Rather unusually, the two main sections of the *ġāyat al-maṭlūb* are both termed *muqaddima*, which normally refers to an introduction, while the actual introduction that precedes them has no title. Although much briefer than the following sections, and in certain ways highly conventional, it is consciously organized and carefully crafted in order to touch upon a number of significant themes, justify what is to follow, and make it suitable for presentation to an eminent patron, who receives lavish praise, eloquently expressed. Much of it, like other texts of the period, is couched in rhymed prose, *saj‘*, a standard literary device with paired phrases the second of which, as well as providing the rhyme, is often syntactically parallel to the first and, semantically, a varied restatement that may add further depth, but frequently results in a significant level of redundancy.[1] This emphasis on stylistic polish yields, accordingly, a ratio of information to expression that is markedly lower than in plain expository prose, so that here, where the emphasis is on musicological content rather than a probing of literary technique, detailed explication would be excessive: generally a summary of such passages will suffice, and as a result the following commentary, which pursues a conventional linear trajectory through the initial section, will be fairly compressed, while omitting nothing of substance.

fol. 1v

After the obligatory *basmala*, invoking the name of God, the standard devotional beginning (*taḥmīd*) first asks for His forgiveness upon the author, whose name is given in full, upon his parents, and upon Muslims in general, and then proceeds as expected with a routine religious expression that praises God and invokes his blessing upon the Prophet Muhammad and his family and companions. But the formula is invaded by something that is most certainly not routine, a rather striking and complex conceit in rhyming prose that immediately and audaciously confronts the dubious ethical status so persistently attributed to music by invoking God as, in effect, a special kind of patron: He is both Himself expert in listening to the complexities of music and One who unites others in an appreciation of its delightful beauties, including, even, the beauties of its female performers. Although brief, this particular passage, with its syntactic parallelism, chiasmus and initial as well as end rhyme, serves well to illustrate the stylistic effects that Ibn Kurr repeatedly aims for in the introduction:

al-ḥamdu lillāhi
sāmi‘i ’l-*aṣwāt* **i ‘alā** *’ḫtilāfi naġamātihā*
wa-***jāmi‘i ’l-qulūbi ‘alā*** *muṭribāti ’l-maḥāsini*
wa-maḥāsini muṭrib ***ātihā***

Praise be to God,
the Hearer of songs with all their different melodies,
and the Conjoiner of hearts at the pleasures that beauty gives
and the beauty of those that give pleasure

However, the complexities of such passages are by no means simply formal: the reader is allowed access through morphological associations into wider semantic fields, with *sāmi‘*, for example, readily invoking *samī‘*, ‘all-hearing’, one of the attributes of God, in relation to which *aṣwāt*, sounds embracing also the human voices to which God attends, are only clearly identified as melodies by the following *naġamāt*. Incorporating them in this way into a wider divinely sanctioned order is to insinuate a justification, the implicit provision of a defence against those who would condemn music. Nor, in a text produced by a writer described as a Sufi, should one ignore the potential relationship between *jāmi‘* and *jam‘*, a stage on the soul’s path to the perception of divine unity.[2] But the natural-seeming statement that beauty takes its due place in this inclusive scheme of things is couched with a rhetorical exuberance that suggests yet another cultural dimension, that of the witty and even frivolous, especially when it concludes by mentioning singing girls, allowing a reading that playfully counterbalances the preceding high seriousness.

The following reference to His ability to attune people’s hearing to the subtle and wise meanings conveyed by the words calls upon another technique characteristic of such writing, the use of polysemy to enrich – or perhaps, better, saturate – the text with allusions. Here the ‘utterances’ (*aqwāl*) are not just confined to song texts but may also be understood to have hovering in the background the designation of a particular song form, while the wise sayings they contain are pearls extracted from ‘the seas of the measures of their artifices and attributes’, a clumsily literal rendering of *biḥār awzān ṣanā’i‘ihā wa-ṣifātihā*, a complex multilayered phrase juxtaposing terms whose semantic tendrils extend to prosody and music (*awzān* = metres and rhythms, while *biḥār* may recall an alternative plural, *buḥūr*, also used in the theory of prosody and music) and even grammar (*awzān* = conjugations and *ṣifāt* = adjectives). Such use of language is both consciously crafted and technically playful, but this time there is no trace of frivolity: the tone is sober throughout.

Yet it is difficult to know how seriously this remark should be taken. The Sufi inclinations suggested by the biographical sketches of Ibn Kurr are not evident in what follows, and a glance at the verse selected for the contemporary songs recorded by al-‘Umarī will confirm that the majority of the texts sung consisted not of wise sayings but of fairly routine verse of amorous or bacchic content. While they can certainly be understood metaphorically, there is no hint in Ibn Kurr’s fairly brief reference of any need or inclination to do so, and as it is perfectly obvious that such verse-settings would be decidedly objectionable to the pious, who regarded music as an incitement to dissolute behaviour[3] and would have rejected any suggestion that the verse itself might be a repository of wisdom, it is likely that Ibn Kurr is, rather, making a further defensive gesture here, particularly when account is taken of the immediate intellectual context provided by the intensified onslaught on the permissibility of music associated with his rigorously austere contemporary Ibn Taymiyya (1263–1328),[4] in reaction to which any defence would be wise not just to avoid any admission of laxity but actively to stress elements of moral probity, precisely the line of argument that is developed later.

Less problematic is the phraseology following the reference to Muhammad, which combines the tropes of wisdom and illumination, and the initial thematic area is rounded off in standard fashion by extending the invocation of God's blessing to the Prophet's family and companions. There is then, as we move from fol. 1v to fol. 2r, an abrupt and wholly unexpected transition to cover also the current rulers when faced with critical situations, and although this nearly makes sense as a continuation there is almost certainly a passage missing here, in all probability, indeed, a whole folio.[5] In any event, the reference to the current rulers itself forms a conclusion, for it is followed by the formula *wa-ba'd*, marking the onset of a new section.

What comes next is a eulogy addressed to a patron or potential dedicatee. Despite its relative length, grandiloquence and suitably obsequious nature it does not include a name (another, if incidental, parallel to the *kitāb al-adwār*, which likewise fails to identify its patron), so that one can merely speculate, on the basis of the qualities to which it gives particular prominence, as to the category of person intended. The passage begins with a reference to high, noble status (*al-maqām al-šarīf al-'ālī*), but there is almost certainly no musical pun intended in the use of the word *maqām* here, as it does not form part of Ibn Kurr's technical vocabulary.[6] Rather, there is a constant repetition in what follows of the epithet *šarīf* ('noble'), which suggests that the dedicatee might well be a *šarīf*, one of the descendants of the Prophet, and thus a member of an Arab religious and social élite rather than of the ruling non-Arab military élite, especially as the catalogue of his merits stresses, first, not heroism and martial valour but, endowed by God, virtues and distinction in various branches of knowledge (*'ulūm*). With a further accumulation of syntactically parallel and often nearly synonymous phrases, it speaks in very general terms, but emphasizes the intellectual gifts that enable him to comprehend these disciplines, and it then moves on to add other noble attributes for which he is widely known, thus making him the subject of conversation among his companions, and the choice of vocabulary here is perhaps worth noting: they are called *summār wa-rifāq*, rather than the more usual term associated with a ruler's circle, *nudamā'* – although it could be objected that the choice of *rifāq* was determined by the exigency of rhyme. These further attributes are sources of pride (*mafāḫir, makārim*) that relate less to static inherent qualities than to deeds, among which Ibn Kurr predictably singles out for extended treatment acts of generosity. But generosity is a standard attribute of rulers,

fol. 2v

and he proceeds to yoke together temporal power and intellectual authority (*sulṭān fī al-mulk wa-'l-'ilm*) which, combined with his other qualities, are the attributes guaranteeing for him enduring fame (*ta'abbudan bi-smih*) and ensuring his impact (*iṯbāt rasmih*). From this conjunction we may reasonably conclude, whatever the obligatory exaggerations, that we are dealing with a man of learning who was also holder of a position of administrative responsibility,[7] but perhaps not a member of the Mamluk establishment: it is significant that there is no mention of military exploits.

In marked contrast to the dull repetitions and prosaic expression in the main sections of the work, it has to be said that this opening passage is constructed with considerable care and literary craft. Its rhyme schemes are sometimes triple (*aaa*) rather than the usual double (*aa*); in one case we even have *aabbbcdcdeded*, a complex structure that may be perceived as a not too distant echo of the rhyme schemes of the popular stanzaic *muwaššaḥ*; and it ends with a final rhetorical flourish that cunningly effects a transition, via birdsong, from the world of eulogy to that of the subject matter of the work proper:

> *wa-jūd ḥaqq lil-alsun an tasju' bi-madḥih sarmadā*
> *wa-an yuġabbir ṭayr ḥamdih*
>   *fa-mā aḥsan taġrīdah 'ind wuqū' al-nadā*
>
> Generosity for which tongues should rightly trill praises eternal
> and the birds that extol him should rightly excel:
>   how splendid their song when the dew falls!

Here, the tongues in the first part hark back to a reference made shortly before to the alacrity with which the generous dedicatee provides help[8] when tongues mention him; and the verb *saja'*, translatable as 'warble' or 'coo', also means 'to write *saj'*', rhymed prose. In the second part *ḥamd* is a standard and rather stale rearrangement of the radical letters of its synonym *madḥ* in the first, and there is also a partial phonetic overlap of a like nature between the verbs *ġabbar* and *ġarrad*; but rather more effective, if also quite conventional, is the concluding appeal to the dew, for in addition to the freshness of birdsong at dawn it references yet again the very generosity with which the first part began, having now become the unstinting generosity of the patron which falls upon those who appeal to him for help.[9]

The author then declares his intention to endow the wisdom of this unnamed authority with yet further insights though the work on music that he has composed and wishes to present to him, one manifesting a knowledge of the subject not vouchsafed to many of those claiming expertise in it. Not surprisingly, the dedicatee is described as uniquely qualified to appreciate it, but in the course of dwelling on his intellectual qualities Ibn Kurr again alludes to ruler-like status by slipping in the formula 'may God aid him/grant him victory' (*naṣarah allāh*). The lack of any previous reference to bravery in battle means that he can hardly be referring to a man of the sword, but if we incorporate the appropriateness of this phrase to rulers we nevertheless approach here the model of the scholar-prince, a type frequently depicted in miniature painting of the period, a ruler who converses with sages and patronizes intellectual enquiry.[10]

fol. 3r

What follows, still consciously fashioned in balanced, rhyming phrases, even if now rather more discursive in tone, is a form of apologia. It begins with a denigration of others in which the author proclaims his intention to deal with a subject that they had found too difficult or daunting, or, when they did venture to tackle it, revealed themselves to be incompetent, and there is then a brief burst of praise for his own achievements in which he proclaims not merely mastery of the main topics to be dealt with, the various rhythmic cycles and melodic modes, but even knowledge of intricacies (*daqā'iq*) that remain unfathomable to the most penetrating intellects. Previous writings are disdainfully dismissed, their authors being likened, in a damning Qur'anic reference, to cattle,[11] and to this may be added not just the anonymity but the very silence to which they are consigned: no text is cited, no passage is commented on, and with the solitary exception of al-Fārābī, no other theorist is even named. However, after a further set of bombastic claims about the merits of his own work there comes a slightly less vague – although certainly no more specific – reference to the literature he has dismissed so comprehensively: he claims to have perused (*taṣaffaḥ*) what has been transmitted from the non-Arabs (*ʿajam*), finding in it obscurities (*iškālāt*) that no one he had consulted was able to elucidate.

This passage appears problematic. The term *ʿajam* is usually construed as referring to the Persians, but there would be no particular reason for Ibn Kurr to seek out Persian texts or, more precisely, what had been ‘transmitted’ (*nuqil*) from Persian authorities, as the relatively exiguous earlier Persian literature on the theory of music, with the sole exception of the contribution of Šīrāzī, would have told him hardly anything that he could not have learnt already, if not from his immediate environment then from Arabic sources that one would assume in any case to have been more readily available. Nor would he have encountered in them passages that were puzzlingly obscure (and one might also wonder, given his low estimation of the general level of expertise in the field, why he should have bothered to consult anyone else about them). These anomalies disappear, however, if we consider the reference to be to the Greek theoretical legacy: access to this would have been indirect, thus justifying the expression ‘transmitted from’, and, depending on the sources available, he may well have encountered obscure material that neither he nor his contemporaries could readily construe. Unfortunately, we have no means of knowing what was considered so impenetrable, and the later mention of al-Fārābī’s fallibility likewise fails to identify, let alone elucidate, the particular theoretical issue concerned.

There follows a general reference to an earlier interest shown in music as a science related, however, not to such luminaries as al-Fārābī or al-Kindī but to predecessors (*salaf*) whose merits are confirmed as religious by the attached formula *raḍiya allāh ʿanhum*, one normally associated with the names of the early caliphs and companions of the Prophet. We thereby shift from the technical to a defence of music situated squarely within the moral domain. Earlier models of this approach include the introductory discussion in the section on music in the early tenth-century *al-ʿiqd al-farīd*, [12] but instead of the somewhat loose collection of justificatory material assembled there, Ibn Kurr concentrates upon the positive attitudes towards music, engagement with it, and knowledge of it, exhibited by a restricted number of respected companions of the Prophet or equally eminent figures of the following generation (*tābiʿūn*). There is no reference, as, say, in the *risāla* on music by the Iḫwān al-Ṣafāʾ, to the sages of antiquity: the theme is thus neither the intellectual nobility or classical pedigree of musical speculation nor its centrality within the cosmological order but rather, drawing upon a work by a contemporary scholar, Kamāl al-Dīn Jaʿfar b. Ṯaʿlab b. Jaʿfar al-Adfuwī (1286–1347), entitled *al-imtāʿ fī aḥkām al-samāʿ*, [13] legitimization by precedents supplied by the early Islamic community. Ibn Kurr quotes a lengthy section from this work, which in turn cites an earlier Šāfiʿī authority, Abū Manṣūr al-Baġdādī. [14] Although nowhere stated explicitly, the line of argument in this passage is clear: whatever the weight of the testimony that conservative legists such as Ibn Taymiyya can seek to draw from *ḥadīṯ* in order to declare music illicit (since only the most strained of exegeses could extract anything condemnatory from the Qur’ān), it can be countered by citing as witnesses for the defence a brief selection from among the first generations of Muslims, all implied or stated to be of unimpeachable probity. The citations thus simply describe the positive engagement of these witnesses, whether through direct involvement in musical activity or through intellectual understanding of it.

fol. 4r

First to be mentioned is ʿAbdallāh b. Jaʿfar, who is said to have composed and taught songs to his singing-girls and listened to them performing them to the accompaniment of stringed instruments, this at a time when his uncle ʿAlī b. Abī Ṭālib was caliph (655–61). The case made here is bold in the extreme, provocative even, as it presents a striking catalogue of actions and attitudes that one would expect, rather, to be cited by the prosecution as wholly undesirable and inexcusable, the combination of singing girls and stringed instruments being considered particularly noxious. They are, however, legitimized by being associated with such an august figure: ʿAbdallāh b. Jaʿfar, it is emphasized, was a Companion, being ten years old when the Prophet died. The second witness, ʿĀmir al-Šaʿbī (d. 728), who comes from the next generation, the Followers, born after the death of the Prophet, was a noted scholar, and is appropriately credited with a technical accomplishment, the ability to distinguish between the rhythms of songs, assigning them correctly to *ṯaqīl awwal, ṯaqīl ṯānī*, and so on through the other rhythmic cycles (*wa-mā baʿdahā min al-marātib*). We are then told that the same ability was displayed by another pious and ascetic Follower, ʿAṭāʾ b. Abī Rabāḥ (d. 732–3), a prominent scholar of tradition (*ḥadīṯ*) and Qur’anic interpretation. Next, an even more imposing figure is mentioned, the pious caliph ʿUmar b. ʿAbd al-ʿAzīz (c. 682–720), cited, on the authority of al-Zubayr b. Bakkār (788–870), a noted historian and genealogist,

fol. 4v

as the composer of a melody sung by people in Medina. Then, in order, we are told, in a standard rhetorical ploy, not to prolong the discussion unduly, just one more witness is adduced: ʿAbd al-Malik b. ʿAbd al-ʿAzīz b. Jurayj (d. 766–7), someone who knew the Qur’ān by heart, a man described as a learned legist uniformly admired for his rectitude, [15] but at the same time someone who listened to music and could distinguish between the different song forms *basīṭ, našīd* and *ḫafīf*.

The terms cited for the rhythmic cycles, *ṯaqīl awwal* and *ṯaqīl ṯānī*, are commonplace in early Abbasid theoretical literature, and are generally the first two to be mentioned in any enumeration of the cycles. There is no evidence for their use during the time of the authorities cited, but the point here is less historical precision than the invocation of specialist vocabulary as an indication of technical expertise and hence deep involvement on the part of the authorities cited. The same purpose is served by mention of the terms *basīṭ, našīd* and *ḫafīf*: these are possibly even more anachronistic, [16] but as they reference contemporary formal categories that Ibn Kurr will discuss later they again emphasize to his reader the specialist knowledge the witnesses cited were deemed to possess.

Although not adduced as a further argument in defence of music, the next topic is nevertheless logically related to the previous one. It concerns the superiority of theory over practice, thereby according less importance to the performer, against whom, especially when female, much of the animus of the opponents of music was directed, and more to those who wrote about it in abstract terms, as part of the world of ideas, and whose involvement was therefore unexceptionable. It dismisses the popular view that the musical specialist, *mūsīqī*, was a simple practitioner (*ʿāmil*) rather than a learned expert (*ʿālim*), asserting to the contrary that knowledge, or theory (*ʿilm*), was that on which practice (*ʿamal*) was based and that to which attention should be devoted: the performer relying on practical skill rather than knowledge does no more than provide a simulacrum, an imitation (*muḥākī*) that corresponds (*mumāṯil*) to the melodies, the true nature of which, it is implied, is only vouchsafed to the learned. Otherwise, the argument goes, the virtuous soul (*al-nafs al-fāḍila*)

fol. 5r

would not continually long to reach the essence (*aṣl*) of this theoretical domain (*'ilm*); and how, according to the concluding rhetorical question, could the uninstructed practitioner emit the kinds of judgement, employ the same technical terms, and possess the same expertise as the ancient learned authorities cited above? Beyond that, the argument fails to break new ground, for the claim that theoretical knowledge is a prerequisite for performance to be other than merely imitative is exemplified by appeal to the rhythmic and formal terminology that had been paraded before.

Reverting to rhymed prose for his conclusion, Ibn Kurr states that the purpose of his two *muqaddima*s is, in effect, to substantiate this claim and to show that, contrary to the views of his contemporaries, theoretical knowledge transcends practice. It is at this juncture that he slips in a completely unsubstantiated dig about there being a deficiency in what al-Fārābī 'imagined' (*taḫayyal*). One could well suppose that this arose out of discussions of a topic transmitted orally and distorted in the process, but there is no textual quotation, or even summary, and we are told nothing further. It is, of course, possibly to take issue with al-Fārābī, but he is not referred to again, and what is abundantly clear is that his musical writings leave no discernible trace in what follows: had Ibn Kurr been able to consult either the *kitāb al-mūsīqī al-kabīr* or al-Fārābī's separate and rather more approachable studies on rhythm it is difficult to think that his own exposition would have remained totally unaffected by the encounter, whether or not he found matter to disagree with. It is, in fact, somewhat surprising, even disconcerting, to find in a work proclaiming both the primacy of knowledge and the intention to display it that accusations of deficiency in theoretical matters are levelled at others without the slightest attempt to provide textual evidence.

fol. 5b

In his final remarks Ibn Kurr reverts, predictably, to a more explicitly religious register. Claiming in self-justification that, despite the usual veneration for the ancients (*mutaqaddimūn*), a dispassionate observer might accept that God could in fact reveal to one of the moderns (*muta'aḫḫirūn*) something that many of his predecessors had found difficult to grasp, he asks for His help as he commences the task he has set himself.

In the remainder of the *ġāyat al-maṭlūb* Ibn Kurr abandons rhymed prose, eschews verbal artifice, and lets his linguistic guard down, for there are various deviations from the norms of Classical Arabic (discussed further in Chapter 8) that cannot all be ascribed to scribal negligence. The prose is now plain and expository, yet in providing what is hoped to be a comprehensive survey the approach to the text will proceed as before, that is, a detailed exploration of each topic will be essayed rather than a straight translation. This will have the advantage of avoiding a degree of redundancy – there is a certain amount of needless repetition in the original – but the more important reason is to allow for the inclusion of appropriate discussion of the theoretical and comparative issues raised as well as the several difficulties the text confronts us with. It is these that would in any case make translation a dubious proposition because of its unreliability, since in having to opt for one particular reading or lexical equivalence it would involve not just inevitable if minor distortions but also, in the more problematic passages, the possibility of serious misrepresentation. Preference has therefore been given to providing a detailed commentary, one that omits nothing of the content, occasionally includes plain translation or summary of straightforward passages, but seeks above all to arrive at a coherent interpretation. Some of the conclusions arrived at may well be questionable, but at least the path followed in order to reach them should be clear.

[1] On the prevalence of parallelism see Beeston 1983, and on the evolution of *saj‘* see Rowson 1998.

[2] See Arberry 1970: pp. 604–31.

[3] For a general survey of the arguments adduced see e.g. Robson 1938, Gribetz 1991 and Shiloah 1995.

[4] Although published among his *rasā’il*, his authorship of the relevant work, the *risāla fī al-samā‘ wa-’l-raqṣ wa-’l-ṣurāḫ*, has been disputed, if without denying that the views it expresses are essentially his (see Haq 1944).

[5] For a more detailed discussion see Chapter 8.

[6] First attested c. 1300 in the *durrat al-tāj* by Šīrāzī, it does not become a standard term for mode (or for a group of modes) in Arabic texts until much later.

[7] *rasm*, it may be added, could suggest bureaucratic overtones.

[8] There may also be the suggestion of a parallel here with the mysterious, beneficent figure of al-Ḫiḍr, on whom see the articles ‘Khiḍr-Ilyās’ (P.N. Boratov) and ‘al-Khaḍir’ (A.J. Wensinck) in the *Encyclopaedia of Islam*, 2nd edition.

[9] One might also note, as a further literary device tying the two parts together, that there is a degree of metric parallelism: the beginnings of both can (almost) be read according to a succession of two standard prosodic feet (although not ones that combine in a known metre), and the endings likewise correspond to the prosodic foot *mustaf‘ilun*.

[10] See e.g. Contadini 2012: pp. 72–5.

[11] Qur’ān 25/44, where the phrase concludes a condemnatory catalogue of those who are heedless of the message conveyed by successive prophets.

[12] Ibn ‘Abd Rabbihī (d. 940), *al-‘iqd al-farīd*, ed. A. Amīn et al., vol. 6 (Cairo, 1949).

[13] See Farmer 1965: p. 53.

[14] Presumably Abū Manṣūr ‘Abd al-Qāhir b. Ṭāhir (d. 1037), jurist and mathematician, but no relevant title is cited.

[15] His principal claim to fame, however, is as a transmitter of *ḥadīṯ*.

[16] The first two may, though, have been in use in the early ninth century, as they are cited in the *kitāb al-aġānī* (vol. 5, p. 427) in relation to Isḥāq al-Mawṣilī. It is rather doubtful, though, that they would then have had quite the same connotations as for Ibn Kurr’s contemporaries.

Chapter 3
Rhythm

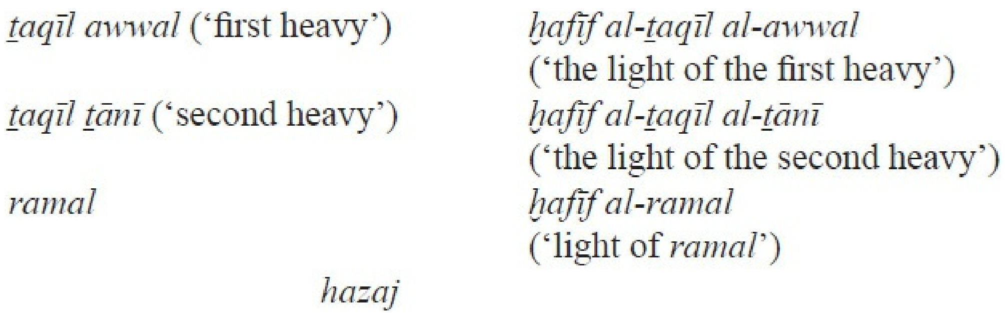
Comprehension of the two main sections of the *ġāyat al-maṭlūb* is hampered somewhat by the absence of analogous texts, that is, ones using the same analytical approach, the same technical terminology and, ideally, offering complementary definitions. There are, in short, few ancillary tools that might help tease out the interpretative difficulties we are sometimes faced with, so that they usually have to be tackled initially by using whatever internal evidence is available: only occasionally does it seem justified to appeal to Systematist texts as keys to understanding, particularly given the fact that Ibn Kurr's definitions frequently appear to be at a considerable remove from those of al-Urmawī and Šīrāzī. Nevertheless, their accounts are not merely unavoidable terms of comparison, but also, given their clarity, partial aids to interpretation, so that the following attempt to explicate Ibn Kurr's text is, at the same time, a form of contrapuntal dialogue, sometimes overt, sometimes implied, that confronts and compares it with these other texts, and especially with the *kitāb al-adwār*, considering not only the differences in the actual information they convey but also the terms of reference they use.

As far as rhythm is concerned, research has hitherto concentrated on the early theorists, and although some attention has also been paid latterly to al-Urmawī and Šīrāzī,[1] the account offered by Ibn Kurr in his first *muqaddima* has simply been ignored.[2] This is rather unfortunate, for his contribution, quirky as it may appear in certain respects, is not only substantial but novel, introducing hitherto unrecorded cycles and techniques of variation. Already atypical is the order of events, the first *muqaddima* dealing primarily with rhythm, the second with modes, for the reverse is the case in the Systematist literature, where rhythm is introduced towards the end, and is often dealt with in a comparatively summary fashion. More significant, however, are the differences in approach, and while the uneven nature of the historical record means that it is no easy matter to trace the steps leading from previous analyses of the rhythmic domain to al-Urmawī's, the historical background to Ibn Kurr's account is even more obscure: there are no surviving texts that speak quite the same language.

The earliest extant layer of documentation suggests that the codification of songs according to their rhythmic characteristics preceded any modal categorization,[3] and the major theorists of the early Abbasid period (spanning approximately the years 800–950) all present a bald set of normative rhythmic structures. Some idea of how these might be varied is suggested by the Iḫwān al-Ṣafā',[4] but only in the case of al-Fārābī do we encounter a sustained and sophisticated attempt to account for the various processes of alteration to which they could be subjected.[5] Thereafter, however, the attention paid to rhythmic morphology in the theoretical literature, broadly conceived, tends to stutter; the subject is increasingly neglected or presented in a derivative manner, with the result that there is no sustained, detailed treatment that would allow subsequent developments to be traced with any confidence: Ibn Sīnā's account is fairly full, but fundamentally abstract,[6] while his pupil Ibn Zayla (d. 1048), rather than describe contemporary phenomena, reverts to material derived from al-Kindī.[7] The accounts offered by al-Urmawī and Ibn Kurr can thus only be related in the most general terms to what had gone before, and that in the *ġāyat al-maṭlūb* is further isolated by the fact that the version found in its Persian near contemporary, the *kanz al-tuḥaf*, is too conservative to be comparable.[8] The other non-Systematist texts of the period unfortunately fail to offer analogous material: they tend in fact to ignore the rhythmic cycles and concentrate exclusively upon modal phenomena.

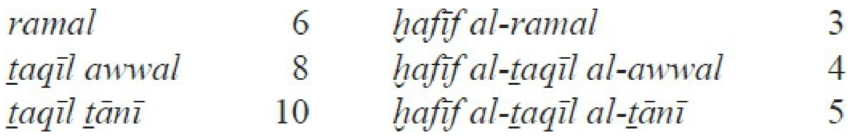
3.1 The early cycles (from al-Kindī to Ibn al-Ṭaḥḥān)

It would be inappropriate here – as well as far too ambitious – to venture a general examination of the early definitions of the rhythmic cycles, but for comparative purposes a brief survey of their main features may be attempted. In the more revelatory treatises of the ninth and tenth centuries, those of al-Kindī,[9] the Iḫwān al-Ṣafā' and, above all, al-Fārābī, the treatment of rhythm (*īqā'*) supplies us not only with an identification of what were perceived to be the fundamental rhythmic structures providing the labels by which pieces were categorized, but also something of their morphology. This comprised both the primary internal pattern of attacks (*naqarāt*) that served to identify them as cycles[10] and the techniques of variation that could be applied to them. In the present context the salient features to note first are the number of cycles identified, seven (or sometimes eight, although the latter probably results from a somewhat artificial increase designed to match the total of eight melodic modes), their names, and the way they are organized into corresponding pairs. The seven thus fall into two sets of three, with one freestanding cycle:



ṯaqīl awwal ('first heavy')	*ḫafīf al-ṯaqīl al-awwal* ('the light of the first heavy')
ṯaqīl ṯānī ('second heavy')	*ḫafīf al-ṯaqīl al-ṯānī* ('the light of the second heavy')
ramal	*ḫafīf al-ramal* ('light of *ramal*')
hazaj	

The additional eighth is, in one version, the logical *ḫafīf al-hazaj* ('the light of *hazaj*'), which creates an evident symmetry overall, while in another it is the rather less logical, and certainly less symmetrical, *ḫafīf al-ḫafīf* ('the light of the light'). The two sets are differentiated by tempo, the one termed 'heavy' (*ṯaqīl*) being the slower, and assuming an approximate 2 : 1 ratio between them[11] we may represent, at a notionally uniform rate, the faster counterparts in terms of a single time unit for every attack listed, and the slower in terms of two, thus yielding the following correspondences for the basic three pairs:



ramal	6	*ḫafīf al-ramal*	3
ṯaqīl awwal	8	*ḫafīf al-ṯaqīl al-awwal*	4
ṯaqīl ṯānī	10	*ḫafīf al-ṯaqīl al-ṯānī*	5

(It should be noted, however, that while the totals match straightforwardly, the inner disposition of the normative attack patterns does not always follow suit.) This leaves *hazaj* as the odd one out. It is sometimes considered a pulse, [12] but is more usually thought of as a cycle containing four time units that is differentiated from *ḫafīf al-ṯaqīl al-awwal* by the internal pattern of attacks. These seven, then, however much they might be subject to internal variation, were perceived to constitute the fundamental rhythmic structures of Arab music, and the point is made that Persians, Byzantines and other ethnic groups had different preferences.

Of later, mainly eleventh-century, accounts the most relevant is that of Ibn al-Ṭaḥḥān (d. after 1057), as it is representative of Fatimid, that is, primarily Egyptian, practice of the mid eleventh century. [13] Following al-Kindī and the Iḫwān al-Ṣafā’, he presents the cycles (now termed *ṭarā’iq*) as consisting of four heavy/light pairs: he adds *ḫafīf al-hazaj* to the previous seven and thus by implication aligns *hazaj* with the heavy group. [14] The number of time units (*naqra*) is specified for the heavy group and is the doubled number assumed above, but with *hazaj* having six rather than eight:

ramal	6
hazaj	6
ṯaqīl awwal	8
ṯaqīl ṯānī	10

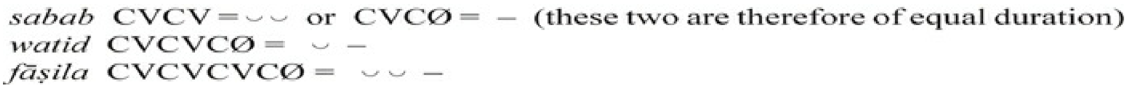
This numerical increase is also maintained in the following statement to the effect that their four light counterparts have the same number of time units, but are distinguished by their quicker tempo. The internal articulation of the cycles is not specified, but both the nomenclature and the time unit totals suggest a considerable degree of continuity. From this, however, it would be unwise to expect to find al-Urmawī and Ibn Kurr providing similar accounts, given the 200-year gap from Ibn al-Ṭaḥḥān to the former and close on 300 to the latter.

3.2 al-Urmawī

In both the *kitāb al-adwār* and the *risāla al-šarafiyya*, duration and rhythmic organization is the poor relation of pitch and modal structure, being relegated almost to the end, but although compressed, the treatment is still quite informative. The earlier presentation, in the *kitāb al-adwār*, provides first a definition of rhythm (*īqā‘*) based upon the concept of the rhythmic cycle, one that admirably combines concision and precision. It begins by referring to ‘a collection of attacks (*naqarāt*) with intervening durations (*azmina*) of specific length (*maḥdūdat al-maqādīr*), forming cycles (*adwār*) of equal magnitude (*mutasāwiyāt al-kammiyya*)’. Emphasis is then placed on sound perception and intuition as sufficient to judge the equivalence between successive cycles: by analogy with the presumed innate ability to distinguish between poetic metres, the ability to grasp the structure of a rhythmic cycle is deemed to be a human faculty, although not, he hastens to add, one shared by all. (It has been noted that although not related to any specific phenomenon, the incapacity of otherwise gifted scholars to grasp matters musical is a theme also touched on by Ibn Kurr.)

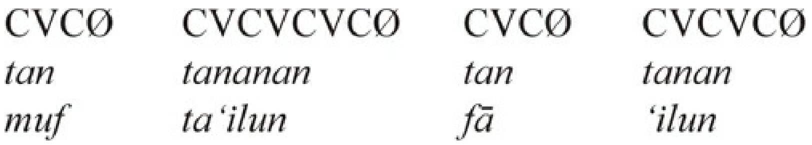
The analogy with poetic metres introduced here is related to a general propensity among theorists to use the conceptual tools of prosody when describing rhythm, and they therefore articulate cycles in ways that correspond to strings of long (–) and short (⏑) syllables. A short syllable in Arabic consists of C (consonant) + V (short vowel), a long of C + either a long vowel (VV) or VC, and a long syllable will be represented as in Arabic script, where both forms are symbolized in the same way, as CVC + Ø, thus visually corresponding to the perception that a long syllable has twice the duration of a short.

To indicate relative durations between attacks al-Urmawī uses the prosodic terms



sabab CVCV = ⏑ ⏑ or CVCØ = – (these two are therefore of equal duration)
watid CVCVCØ = ⏑ –
fāṣila CVCVCVCØ = ⏑ ⏑ –

These allow him to define the various internal segments of the cycles, which are then symbolized by the syllable sequences *ta* (initial in a segment) or *na* (non-initial) = 1 time unit, *tan* or *tana* = 2, *tanan* = 3, *tananan* = 4. An alternative symbolization is provided by various abstract word shapes (compounded from the syllables *fā*, *fa, mu, muf, ta, tun, ‘i, lā*, *lun*) by which metres are conventionally defined, and this method is preferred in the *risāla al-šarafiyya*. We thus have equivalences such as:



CVCØ	CVCVCVCØ	CVCØ	CVCVCØ
tan	*tananan*	*tan*	*tanan*
muf	*ta‘ilun*	*fā*	*‘ilun*

In relation to the total number of time units in a cycle the term *naqra* (‘attack’) is used, the internal pattern of percussions being indicated by the number and distribution of the time units that are actualized (*awqa‘*) by an attack as against those where an attack is omitted (*adraj*).

Viewed against the ninth-tenth century family of seven or eight basic patterns, the repertoire presented by al-Urmawī hardly appears to differ in the number of cycles it contains, although it needs to be pointed out that it does not profess to be exhaustive: it declares an initial concern specifically with 'the six cycles that are well-known (*al-ḍurūb al-mašhūra*) amongst Arab practitioners', viz. *ṯaqīl awwal* ('first heavy'), *ṯaqīl ṯānī* ('second heavy'), *ḫafīf al-ṯaqīl* ('light of the heavy'), *ramal, ḫafīf al-ramal* ('light of *ramal*') and *hazaj*, and to these it later adds just one more, a Persian cycle this time, *fāḫtī* ('the ring-dove cycle'). [15] On the other hand, viewed against the dimensions of the earlier cycles, which were described in terms of 3, 4 or 5 *naqra*, those now considered representative appear significantly longer, despite retaining the same ancient names, for the number of *naqra* they are said to contain ranges, in their initial versions, from 12 to 24. As cycles that are yet longer still appear in later treatises, where totals as high as 88 or 96 time units are recorded, [16] it would be reasonable to think that we are dealing with a continuous process of augmentation, but whatever might be the case later, at this point the contrast is readily explicable as resulting from a terminological recalibration whereby, following the earlier example of Ibn al-Ṭaḥḥān, what had previously been defined in terms of *p naqra* is now held to contain a multiple of *p*. Rather than being a case of gratuitous numerical inflation, this may represent in the first instance a change of analytical perspective: as al-Fārābī's detailed analysis makes clear, when al-Kindī describes *ṯaqīl awwal* succinctly as consisting of 'three successive *naqra* and then a silent *naqra*', [17] the implication is not that it consists of a pattern of four indivisible time units which, if we symbolize a time unit marked by an attack as x, and one not so marked as ., may be represented as /x x x . /. Rather, a *naqra* in a slow cycle denoted an area consisting of more than one time unit within which supplementary attacks could be inserted, so that, assuming it to comprise two time units, the abstract model could be written as /x . x . x . . . /, but with the understanding that it might be realized as e.g. /x . x x x x x . /. [18] In other words, in place of the earlier use of the term *naqra* to denote what could be a divisible zone, with al-Urmawī it now corresponds quite rigidly to the concept of an indivisible time unit, the minimal entity from which the cycles are compounded.

However, the fact that in some instances al-Urmawī also offers a shorter version of a given cycle suggests that we may be faced, in addition, with a shift of perspective (and possibly also practice) with regard to internal variations, and even with a certain fluidity with regard to the perception of what constitutes a cycle. He is well aware, for example, of the fundamental principle of asymmetry without which a cycle cannot be perceived as such, for having offered an initial definition of *ramal* as a cycle of 12 time units consisting of six times /x . /, he then adds that some musicians omit the sixth attack, resulting in /x . x . x . x . x . . . /, 'in order to make it asymmetrical so that [the concept of] the cycle is not lost' (*li'allā tatasāwā al-azmina fa-yujhal al-dawr*). [19] What he fails to do, unfortunately, is address the resulting logical inconsistency, for it could then be claimed that the initial definition, being an undifferentiated series of attacks, does not actually constitute a cycle. The principle of asymmetry also leads to the conclusion that the three cycles the descriptions of which contain symmetrical halves (*ṯaqīl ṯānī, ḫafīf al-ṯaqīl*, and *fāḫtī*) might be double statements of a more fundamental entity, and that *ḫafīf al-ramal*, which has four identical quarters, might be a quadruple statement, and that this is indeed so is confirmed in the *kitāb al-adwār* for two of the four by the second of the two explanations reported for the semantic relationship between the names of the cycles *ṯaqīl awwal, ṯaqīl ṯānī* and *ḫafīf al-ṯaqīl*. [20] This sets up, precisely, a hierarchical distinction of length such that, in relation to the understood 16 time units of *ṯaqīl awwal, ṯaqīl ṯānī* has a cycle of eight time units and *ḫafīf al-ṯaqīl* one of four. Al-Urmawī then comments, driving the point home, that for those who adhere to this view, two cycles of *ṯaqīl ṯānī* are equivalent to one of *ṯaqīl awwal*, and two cycles of *ḫafīf al-ṯaqīl* are equivalent to one of *ṯaqīl ṯānī*. Similarly, what had been presented in the *kitāb al-adwār* as the 24 time unit *ṯaqīl al-ramal* is referred to in the later *risāla al-šarafiyya* as *muḍā'af al-ramal* ('double *ramal*'). [21] It may be possible to detect here a distant echo of the analytical approach espoused by al-Fārābī, who views a cycle as a particular arrangement of attacks followed by a pause, the length of which can only be known when the beginning of the next cycle is reached, in other words that two cycles are needed for a precise definition of one. [22] But of more obvious and immediate relevance is once more the analogy with prosody, for the *risāla al-šarafiyya* explicitly states, [23] again in relation to the *ramal* group, that a cycle, just like a line of verse, needs to be perceived to fall into two halves, with the result that two cycles of the 12 time unit *ramal* are considered one cycle (that is, *muḍā'af al-ramal*), and one cycle of *ramal* is likewise made up of two cycles of *ḫafīf al-ramal*, defined as the six time unit *mufta'ilun* (= CVCØCVCVCVCØ) =/x . x x x . /. We thus have a 24 : 12 : 6 relationship that neatly parallels the 16 : 8 : 4 established above for the *ṯaqīl* group, although the symmetry is undermined somewhat by the fact that the definition of *ḫafīf al-ramal* given in the *kitāb al-adwār* is inexplicably different. But variations between definitions also occur elsewhere, perhaps most significantly in the account given of *fāḫtī*, for this is considered to be a cycle of variable length as well as of internal disposition: it is defined as consisting of 20 time units divided either 2 + 4 + 4 + 2 + 4 + 4 or 4 + 2 + 4 + 4 + 2 + 4, but with the further comment that it is possible to add two further segments of four, yielding 2 + 4 + 4 + 4 + 2 + 4 + 4 + 4 and 4 + 2 + 4 + 4 + 4 + 2 + 4 + 4 respectively. [24]

The total account, including all the different versions mentioned in both treatises, is presented in Figure 3.1, which also incorporates a further concept, that of the 'fundamental pattern' (*ḍarb al-aṣl*) indicated for several cycles, consisting of just two specific attacks within the cycle. These will be symbolized as X, while Ẋ will be used to symbolize those time units that are neither specifically x nor specifically . , that is, those where an attack is optional.

ṯaqīl awwal	(16)		3 + 3 + 4 + 2 + 4 x ẋ . x ẋ . X ẋ ẋ . x . X ẋ ẋ .
		or:	x ẋ . x ẋ . x ẋ X . x . X ẋ ẋ.[25]
ṯaqīl ṯānī	(16)		3 + 3 + 2 + 3 + 3 + 2 X ẋ . x ẋ . x . x ẋ . x X̲ . x .
	(8)		3 + 3 + 2 x ẋ . x ẋ . x .[26]
ḫafīf al-ṯaqīl[27]	(16)		2 + 1 + 1 + 2 + 1 + 1 + 2 + 1 + 1 + 2 + 1 + 1 X . x x x . x x x . x x X . x x
	(4)		[2 + 1 + 1 x . x x]
		or:	1 + 1 + 2 x x x .[28]
ṯaqīl al-ramal	(24)		4 + 4 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 X ẋ ẋ . x ẋ ẋ . x . x . x . x . x . X . x . x .
		or:	4 + 4 + 2 + 2 + 2 + 2 + 2 + 2 + 4 X ẋ ẋ . x ẋ ẋ . x . x . x . x . x . X . x ẋ ẋ .
muḍā'af al-ramal	(24)		4 + 2 + 4 + 2 + 4 + 2 + 4 + 2 x ẋ ẋ . x . x ẋ ẋ . x . x ẋ ẋ . x . x ẋ ẋ . x .
ramal	(12)		2 + 2 + 2 + 2 + 2 + 2 X . x . x . x . x . X .
		or:	2 + 2 + 2 + 2 + 4 X . x . x . x . X . . .
		or:	2 + 4 + 2 + 4 x . x x x . x . x x x .

		or:	2 + 2 + 4 + 4
			x . x . x . . . x . . .
		or:	1 + 1 + 2 + 2 + 1 + 1 + 2 + 2
			x x x . x . x x x . x .[29]
ḫafīf al-ramal	(10)		2 + 3 + 2 + 3
			X . x ẋ . x . X ẋ .
	(6)		2 + 4
			x . x x x .[30]
hazaj	(12)		4 + 3 + 3 + 2
			X ẋ ẋ . x ẋ . x X . x .
	(6)		4 + 2
			x ẋ ẋ . x .
			3 + 3
			x ẋ . x ẋ .[31]
fāḫitī	(20)		4 + 2 + 4 + 4 + 2 + 4
			x . . . x . x . . . x . . . x . x . . .
		or:	2 + 4 + 4 + 2 + 4 + 4
			x . x . . . x . . . x . x . . . x . . .[32]
	(28)		2 + 4 + 4 + 4 + 2 + 4 + 4 + 4
			x . x . . . x . . . x . . . x . x . . . x . . . x . . .[33]

Figure 3.1 The Systematist cycles

Assembled thus, we seem to be faced with an account in which variants of different length and internal structure jostle together in rather chaotic fashion. But a degree of order can be restored, and clearer links with earlier accounts established, if we accept that some of the versions are indeed compounds. As suggested above, the first version of *ṯaqīl ṯānī* may be regarded as a double of the second, and the first of *ḫafīf al-ṯaqīl* as a quadruple statement of the second; and we have seen that *ṯaqīl al-ramal* is expressly called *muḍāʿaf al-ramal* in the *risāla al-šarafiyya* , that is, the double of *ramal* , of which *ḫafīf al-ramal* is, in turn, considered a half. With *hazaj* , again, we have one version that is twice the length of the others, albeit with a different internal division, while with *fāḫitī* one could certainly posit, because of its symmetrical arrangement, an underlying structure of half the total, whether of ten (either 4 + 2 + 4 or 2 + 4 + 4) or 14 (2 + 4 + 4 + 4) time units.

Taking in each case the lowest value available, we would have basic structures with the time unit totals shown in Figure 3.2 .

hazaj	3
ḫafīf al-ṯaqīl	4
ḫafīf al-ramal	6
ṯaqīl ṯānī	8
fāḫitī	10
ramal	12
fāḫitī	14
ṯaqīl awwal	16

Figure 3.2 Time unit totals

Compared with the earlier versions, one may note, first, a considerable but not complete retention of nomenclature: we have just *ḫafīf al-ṯaqīl* where previously we had *ḫafīf al-ṯaqīl al-awwal* and *ḫafīf al-ṯaqīl al-ṯānī* , and the alternative name of the latter, *māḫūrī* , also disappears, along with the rather dubious *ḫafīf al-hazaj* . On the other hand, we have the expansion of the *ramal* pair to include a third term, *ḫafīf al-ramal* , and the addition of a further cycle, *fāḫitī* . As noted, this is regarded as essentially Persian, but is said to be little used; rather, most compositions by Persians [34] are in *ṯaqīl al-ramal* , which they call *ḍarb al-aṣl* (‘the basic rhythm’). [35] Other names mentioned are *muḫammas*, said to be what some people call *ḫafīf al-ṯaqīl*, and *warašān*, an alternative name for *ṯaqīl awwal*.

As far as internal structure is concerned, one may note, as a topic to be explored later, the presence of cycles combining binary and ternary cells and, in general, the degree of variation in the distribution of cells. Yet further cycles, which may have been local Persian forms, are noted by Šīrāzī, as well as additional variations,[36] some of which provide additional evidence for the halving of cycles.

3.3 Ibn Kurr

When considered against the background of the above Systematist formulations, much in Ibn Kurr's treatment appears initially to be familiar, both in substance and in approach. But the appearance is deceptive, and his account is certainly not straightforwardly – if at all – derivative of them: its terminology and definitions are in several respects at variance from them and, importantly, it approaches the question of internal structure from another angle and provides something they do not, a categorization of variant structures, with an associated nomenclature.

3.3.1 Terminology

As might be expected, before giving a blow-by-blow account of the individual cycles Ibn Kurr offers an introduction, in this case a fairly brief one in which various terms are defined. But rather than attempt, like al-Urmawī, a precise initial statement of what constitutes a rhythmic cycle, he begins with a curt encapsulation of the subject matter as

fol. 5v

'knowledge of rhythmic cycles and divisions' (*'ilm al-ḍurūb wa-'l-qisam*),[37] where the second term might relate directly to the cycles, equivalent, perhaps, to '[their sub-]divisions', but may possibly be thought to designate the various further categories, shading into the formal, with which the first *muqaddima* concludes. In any event, we may note that rather than the Systematist term *dawr* ('cycle'), he opts at the outset for the more general term *ḍarb*, pl. *ḍurūb* ('beat, rhythm'), although at a later point he will introduce both *dawr* and the related term *dā'ira*, pl. *dawā'ir* ('circle') as, in effect, equivalent in substance if not in status. They do not, however, figure in his initial succinct exposition of analytical terms, which can be summarized as:

There are 11 *ḍurūb*, cycles, equated with

uṣūl (sing. *aṣl*)	fundamental structures,[38] made up of (*maqsūm min*)[39] a number of
rāḥ (pl. *rāḥāt*)	a unit of measurement that is not, however, defined as a single 'letter' (*ḥarf*, pl. *ḥurūf*), that is, a short syllable = an indivisible time unit, but is rather said to have the duration (*zaman*) of two letters, each of which has an initial
naqra	an attack, causing the onset (*yu'aṯṯir īqā'*) of an audible (*yusma'*)
ṣawt	sound, whereas in non-instrumental performance (*fī ġayr al-āla*) the first has an initial attack while the second is made a
zaman li-'stiqbāl	a further duration pending the onset of the next *rāḥ*.[40]

To be noted here is the contrast between instrumental performance and vocal (expressed negatively as 'non-instrumental'), the former allowing two attacks within each *rāḥ*, the latter only one. There is nothing problematic about the concept, readily explicable in terms of the rapid decay on plucked string instruments necessitating a greater number of attacks relative to the voice, and for a parallel one might cite the later testimony of Marāġī, who states that with each *ḥaraka* (equivalent to Ibn Kurr's *ḥarf*)[41] may be associated an attack, the plectrum (*miḍrāb*) movement being down on the string for the *ta* of each *tana* and up on each *na*.[42] However, although the inclusion of this distinction within an introductory set of definitions is logically justified, the prominence thereby accorded it seems unwarranted, since a specifically instrumental realization of a rhythmic cycle is mentioned only once, and then in relation to a particular variant form: the dominant mode throughout Ibn Kurr's account is, by implication, that of vocal performance, with a *rāḥ* being construed as consisting of two time units only the first of which has an initial attack. The successive *rāḥāt* are then symbolized, accordingly, as *tan tan tan* …, that is, with two letters for each (i.e. the consonants *t* and *n*, the intervening short vowel being discounted as it is not represented by a separate letter in the Arabic script), the contrast between them representing that between an initial attack and a following absence of an attack: each *tan* is thus equivalent to a long syllable (CVCØ), which, in turn, as we have seen in al-Urmawī's account, is equivalent to two short syllables (CVCV having the same duration as CVCØ). The alternative prosodic representation discussed and used by al-Urmawī is, however, ignored completely by Ibn Kurr, who uses only musical mnemonics such as *tan, ta* and *nan*, although he adds to the range by including contrasts of timbre and/or dynamics that both al-Urmawī and Šīrāzī fail to signal.

Within Ibn Kurr's initial set of terms, the main surprise is the inclusion of the Persian word *rāḥ*,[43] one unknown not only to al-Urmawī but also to Šīrāzī, despite his writing in Persian: all the others, however, are Arabic, and can be aligned with preceding usage, even if the parallels may not be exact. A further three novel terms, *māšī, muḥarrak* (or *muḥarrik*) and *šanbar*, occur later in the text, but there is no mention of them in the introduction, let alone any definition. They relate to forms of internal variation, and will be discussed below.

3.3.2 Structure

Having briefly introduced his basic concepts, Ibn Kurr begins a more extended discussion of the internal structure of cycles.

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Each one is said to have distinguishing features (*fawāṣil*) that mark it off from the others,[44] consisting of two particular attacks within its duration,[45] and he introduces here the term *dawr* ('cycle'), underlining its recurrent nature. Thus in naming the cycles the usual term is *ḍarb*, whereas in describing their structure *dawr* is preferred. Ibn Kurr also includes the information that some cycles are divisible into quarters (*rubāʿī*), some not (although the natural assumption that the quarters are equal later proves not to be valid in every case), and then turns to the positioning of the two particular attacks: when a cycle (*dawr*) is divisible into quarters, the first attack is the onset of the last *rāḥ* in the third quarter, and the second is the onset of the final *rāḥ* of the cycle.

A further division of a cycle is into two *farʿ* (‘branch, subdivision’),[46] in effect, into halves (although, as with the quarters, we shall find that they are not equal in every instance), and each half is also marked by two characteristic attacks.[47] For the first half the first attack is after the first quarter (of the whole cycle), the second is the onset of the last *rāḥ* of the second quarter; and for the second half the first attack is after

fol. 6v

the third quarter, while the second is the onset of the last *rāḥ* of the cycle. No general prescription is provided for cycles that are not divisible into quarters: these, we are told, will be dealt with on a case-by-case basis. Likewise, all that is said about the two *farʿ* of such cycles is that the first is constituted (*taṣawwar*) within the segment preceding the first of its two characteristic attacks, the second within the remainder. There is, though, one exception, *fāḫta*, concerning which Ibn Kurr informs us, rather cryptically, that every two cycles (*dawr*) form a cycle (*dawr*), not divisible into quarters, that is its *aṣl*: it is this that has the two characteristic attacks, and it is congruent with (*wāfaq*) the *uṣūl* in that it has two constituent *farʿ*, namely each one of the two *fāḫta* cycles. However, it differs from the *uṣūl* in that the remainder after the first of its two characteristic attacks cannot constitute a second *farʿ*. It will, though, we are told, be described in due course.

Although the terminology is quite different, as is the style of argumentation, there are, nevertheless, certain parallels here with the *kitāb al-adwār*. It has been seen that in some cases the division of cycles into halves and quarters is implied, even if al-Urmawī does not explicitly discuss this as a structural concept. He does, though, explicitly mention the presence of two particularly indicative attacks, which for him constitute the ‘fundamental pattern’ (*ḍarb al-aṣl*). But although these are precisely the first two terms to be introduced by Ibn Kurr, he does not combine them in this way, and in fact does not use either term in relation to this particular phenomenon. Further, despite the fact that the concept is shared, there is no agreement between al-Urmawī and Ibn Kurr, either here or elsewhere, as to the positioning of the two attacks within a cycle.

3.4 Individual cycles

The next section (*faṣl*) contains detailed accounts of the individual cycles. At first sight, the repertoire of cycles discussed by Ibn Kurr is, as one would expect, reasonably familiar, at least to the extent that the names used by earlier theorists are by and large present. Thus in addition to a group of terms familiar from al-Fārābī and other early Abbasid authorities that survive in al-Urmawī’s account, consisting of *ṯaqīl awwal, ṯaqīl ṯānī* and *ramal* (but not *hazaj*), we find others introduced by al-Urmawī, *muḫammas* (as an alternative name for *ṯaqīl al-ramal*) and *warašān* (an alternative name for *ṯaqīl awwal*). We also encounter what al-Urmawī considers to be the primarily Persian cycle *fāḫtī* (now in the form *fāḫta*), and, among the additional cycle names mentioned by Šīrāzī, *turkī*, so that on the basis of these alone one would assume not merely that Cairo shared with Baghdad a considerable number of cycles of Arab origin, but also the strong possibility that these, together with *fāḫtī* and the other cycles known to Šīrāzī, formed part of a wider Arabo-Persian rhythmic repertoire, thereby pointing towards a gradual effacement of the cultural divide in rhythmic preferences that al-Urmawī had recognized as significant in the mid thirteenth century, a move, that is, towards homogeneity. As we shall see, however, these indications are deceptive, and the conclusion erroneous.

The following survey of the individual cycles follows, with one exception, Ibn Kurr’s order of presentation. It considers, for each, the definitions given of the number of time units, the pattern of attacks, the position of the two distinctive attacks and, where given, the *farʿ* forms (normally but not always halves, and with their own pattern of attacks) and the structure of the quarters. What it omits from consideration, in contrast, is the information he gives about the *māšī, muḫarrak* and *šanbar* forms that some cycles possess. Given the problems of interpretation involved, and also the fact that they are sometimes common to more than one cycle, they are best dealt with collectively at a later stage.

The section begins with a brief prefatory statement proclaiming, once more, the division of music into

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rhythms and modes, and stating that if one wishes to understand rhythms (*ḍurūb*) and combine *rāḥāt* into defined cycles (*dawāʾir maḥṣūra*)[48] comprising primary (*aṣl*) forms, divisions (*farʿ*) and so on, one should know that the longest block of *rāḥāt* is constituted by

3.4.1 ṯaqīl awwal (‘first heavy’)

The catalogue of the cycles (previously announced to be 11 in number, but 12 according to the ensuing inventory) thus begins quite deliberately with the longest, although it does not then proceed by progressive reductions until reaching the shortest. The duration of *ṯaqīl awwal* is stated to be 24 *rāḥ*, that is, 48 time units (*naqra*) from 48 letters (*ḥarf*). As definers of duration *naqra* and *ḥarf* are practically identical: each one corresponds to a time unit,[49] although a reason for the apparently redundant use of both may be found in the following representation using the syllable *tan* for a *rāḥ*, so that each of its two time units is conveyed visually by a letter. The 24 *tan* are then laid out as two lines of 12, the first uninterrupted and the second with a gap in the middle:

tan tan tan tan tan tan tan tan tan tan tan tan
tan tan tan tan tan tan   tan tan tan tan tan tan

suggesting therefore a possible 24 + 12 + 12 internal structure. But the following statement fails to elaborate on this: rather, it tells us that to make a cycle distinct from the next, one proceeds from the beginning until time unit 35, associating an attack with it,

fol. 7v

and then adds a second attack at time unit 47. There is no mention of an attack on the first time unit of the cycle, but time unit 48 is defined as a 'completion' (*takmila*) of the 24 *rāh* which is a 'duration pending' (*zaman li-'stiqbāl*) the onset of another cycle. (This definition of the final time unit is repeated regularly for the following cycles, and will not be referred to again.)

Ibn Kurr's account of *ṯaqīl awwal* proceeds no further, but as he adds a considerable amount of supplementary matter for most other cycles it is tempting to think that the text might be defective at this point, with a significant amount of material having been omitted. One would have expected a following definition of the distribution of the attacks in the *far'* divisions (= halves) and even quarters of the cycle, and an account of at least some of the variants classifiable as *māšī, muḥarrak* or *šanbar*. However, exactly the same absences mark the description of the third cycle in the list, *awwal ṯaqīl*, and to find such complete omissions in parallel would be too much of a coincidence. The safer conclusion, therefore, is that the text is sound, and that these two cycles, quite inexplicably, were not subjected to the same processes in performance as the others, being in consequence far more inflexible.

Set against al-Urmawī's account, what Ibn Kurr tells us here looks familiar only to the extent that *ṯaqīl awwal* is chosen as the first cycle to be presented. The number of time units is not only different but seemingly unrelated, since while 48 could readily be interpreted as a doubling of 24, it is more difficult to think that it could be a tripling of al-Urmawī's 16: if anything, it suggests that there could have been various accumulations of a basic structure of eight. However, the internal division given by al-Urmawī, 3 + 3 + 4 + 2 + 4, runs counter to this (it would have to be understood as a reformulation of an earlier, unattested 8 + 8), and the internal structure of Ibn Kurr's cycle suggested by the clearly deliberate layout of the superimposed *tan* layers is also unrelated to a hypothetical string of units of eight.

3.4.2 **ḫurāsānī**

To be expected after *ṯaqīl awwal* would be *ṯaqīl ṯānī*, the 'second heavy', and this is, indeed, what Ibn Kurr gives. But he immediately adds that it is now known as *ḫurāsānī*, and this is evidently his preferred designation. It is defined as consisting of 24 time units, divisible into two *far'* and also into quarters. The later presentation of the two *far'* is quite straightforward, but the initial statement appears peculiar: after 'every cycle of it is two *far'* ' we have a phrase the obvious reading of which would be *li-ba'īdih* (*fa-kull dawrayn minh far'ān li-ba'īdih*), which makes no sense, followed by 'because every two cycles of it have the duration of', followed by what one would assume to be a repeat of *li-ba'īdih* (*li-anna kull dawrayn minh zaman li-ba'īdih*). Clearly, what is needed here is the name of another cycle, and the point is confirmed in the following account of *ṯānī ṯaqīl*, where we encounter virtually the same construction, the first phrase being 'every two cycles of it are two *far'* of *awwal ṯaqīl* ', referring to the unambiguous relationship between *ṯānī ṯaqīl* and *awwal ṯaqīl*, the former being a cycle of 22 time units, the latter of 44: a cycle of the former thus is equivalent to a *far'* of the latter. The logic of the passage thus suggests that the reference should be to *ṯaqīl awwal*, the one cycle that is twice as long as *ḫurāsānī*, thus yielding an exact match with the following relationship between *ṯānī ṯaqīl* and *awwal ṯaqīl*. However, for this a rather drastic emendation would be required,[50] and another solution is to be preferred, however arithmetically wayward it may appear. On virtually every subsequent occurrence of the problematic phrase the dot associated with the *b* is missing, thus allowing the reading *yu'īduh* in place of *ba'īdih*, to be understood as a shorthand reference (despite being highly unorthodox, because it is a verbal phrase where a noun phrase is required)[51] for a cycle that is designated in full as *al-sittat 'ašarī yu'īd al-muḫammas al-qaṣīr* ('cycle of 16 [*rāh*] repeating the short fivefold'). But in later headings this is abbreviated to *yu'īd al-muḫammas al-qaṣīr*, of which *yu'īduh* ('it repeats it') may be seen to be a further abbreviation, and matters are further clarified in the account of the cycle *muḫammas qaṣīr*, where Ibn Kurr states (*fol. 14b*) that 'every two cycles of it are two *far'* of *yu'īduh* ', which makes perfect sense: *muḫammas qaṣīr* consists of 16 time units, and what we may prefer to abbreviate to *al-sittat 'ašarī* in place of *yu'īduh* is a cycle of 32 time units. This is followed by 'just as a cycle of *ḫurāsānī* is two *far'* of *yu'īduh* ', that is, a repetition of the first statement concerning *ḫurāsānī*. But if the text may now be considered secure, it still appears to be arithmetically perverse, for against the 32 time units of *al-sittat 'ašarī* are now set the 24 of *ḫurāsānī*. Nevertheless, that this is deliberate is shown by the parallel statement later that *muḫammas qaṣīr*, with its 16 time units, is a 'type' (*naw'*) of *ṯaqīl ṯānī*, i.e. *ḫurāsānī*. Ibn Kurr is thus establishing a relationship, the nature of which has yet to be elucidated, between parts of cycles where the simple ratio between the time unit totals is not the expected 2 : 1.

The layout of the representation of the *ḫurāsānī* cycle in the form of 12 *tan* syllables arrays them again in two lines, each one consisting of two groups of three:

> *tan tan tan* *tan tan tan* ,
> *tan tan tan* *tan tan tan* ,

suggesting therefore an internal 6 + 6 + 6 + 6 structure,
fol. 8r
and as before we are told how to make a cycle (*ḍarb*) with two distinctive attacks: in accordance with the general rule enunciated above the first is placed at time unit 17, the penultimate time unit of the third quarter, the second at time unit 23, the penultimate time unit of the cycle.

We then have a section (*faṣl*) devoted to the two *far'* of *ḫurāsānī*. These are similarly articulated in terms of two defining attacks: for the first *far'* on time units seven and 11,
fol. 8v
and for the second on time units 19 and 23. The two *far'* are thus identical halves of the cycle, and the positioning of the attacks now does correspond to the earlier 6 + 6 + 6 + 6 format. If we mark these divisions, and represent a *tan* without an attack as o . and one with an attack as x . , we have:

> o . o . o . /x . o . x . /
> o . o . o . /x . o . x . //

The general approach to the distribution of the two attacks is thus similar to that in the complete cycle (for a comparison of the two, and of the other variants, see Figure 3.6). It is clear, however, that the halves are not miniaturized versions of the whole: if anything, they suggest an alternative articulation that allows the internal division into quarters to emerge.

As with *ṯaqīl awwal* , there is nothing here to suggest a link with al-Urmawī 's *ṯaqīl ṯānī*, and even the name is being effaced. Instead of a basic eight we apparently have a basic six, and the total number of time units is unrelated. The 24 time unit total of *ḫurāsānī* is matched in al-Urmawī 's repertoire by *ṯaqīl al-ramal* , but the faint possibility of a switch of names can be discounted; nor, as will be seen below, are there any points of similarity in their respective internal structures.

All the following cycles are prefaced by the term *ḍarb* (‘rhythmic cycle’), but nothing can be read into its omission from the first two.
fol. 9v

3.4.3 **awwal ṯaqīl** *(‘heavy first’)*

Surprisingly, Ibn Kurr continues with a reversal of the terms of the first cycle. One might imagine *awwal ṯaqīl* to be no more than a variation on the name (although elsewhere we find, consistently, *(al-)ṯaqīl (al-)awwal*), but it is clear that we are in fact dealing here with a separate cycle, one containing (22 *rāḥ* or) 44 time units instead of the 48 time units of *ṯaqīl awwal* . The mnemonic syllable representation is again arrayed in two identical lines, each one made up of two identical groups:

> *tanan tan tan tan tan, tanan tan tan tan tan* ,
> *tanan tan tan tan tan, tanan tan tan tan tan* ,

and Ibn Kurr states explicitly that it is divided into four quarters of 11 time units each.[52] The two distinctive attacks for this cycle occur, predictably, at the onset of the final *rāḥ* of the third and fourth quarters, that is, on time units 32 and 43:

> o . . o . o . o . o . / o . . o . o . o . o . /
> o . . o . o . o . X . / o . . o . o . o . X . //

There is no analogy to this cycle in the al-Urmawī corpus, which fails to include any entity of 44, 22 or 11 time units, but it is worth noting as a possible, if tenuous connection, that both Ibn Kurr’s *awwal ṯaqīl* and al-Urmawī 's *ṯaqīl awwal* begin, unusually, with *tanan* . However, while the latter continues with another *tanan* , the former reverts to the more normal string of duple elements.

As with *ṯaqīl awwal* , no halves, quarters, or variant forms are mentioned.
fol. 10r

3.4.4 **ṯānī ṯaqīl** *(‘heavy second’)*

Logically, Ibn Kurr continues by also presenting the reversal of the terms of the second cycle, so that we have, once more, a differentiation recognized nowhere else. There is, again, no relationship to be detected with al-Urmawī 's *ṯaqīl ṯānī* apart from the fact that they both begin with *tanan* . There is, however, a close relationship with the preceding *awwal ṯaqīl* , for *ṯānī ṯaqīl* is a cycle of (11 *rāḥ* or) 22 time units, and this is underlined by Ibn Kurr himself when he states that two cycles (of *ṯānī ṯaqīl*) are two halves (*far‘*) of *awwal ṯaqīl* , having the same duration as one cycle of *awwal ṯaqīl* .

Despite its odd number of *rāḥ* , and consequently a time unit total of which four is not a factor, *ṯānī ṯaqīl* is one of the cycles divisible into quarters. These are inevitably unequal, with the first and third consisting of *tanan tan* (defined as five *ḥarf* = two and a half *rāḥ*), the second and fourth of *tan tan tan* (six *ḥarf* = three *rāḥ*). The mnemonic representation is, consequently:

> *tanan tan, tan tan tan* [,] *tanan tan* [,] *tan tan tan*

Ibn Kurr then informs us that the two distinctive attacks marking one cycle from the next are situated
fol. 10v
at time units 15 and 21, after which he reverts to the quarters, stating that they terminate, respectively, with a *naqra* at *ḥarf* 4, 10, 15 and 21. These correspond to the onset of the final *tan* in each (or, in his terminology, the final *rāḥ*), and the use here of the term *naqra* in combination with *ḥarf* could be read as indicating that the identification of the cycle when conceived as falling into four sections was made by attacks at these points (marking them as x, but the two that coincide with the two distinctive attacks of the whole cycle as X):

> o . . x . / o . o . x . /
> o . . X . / o . o . X . //

However, to give an explicit indication of an attack Ibn Kurr elsewhere uses the formulaic phrase ‘to be marked as a sound with an attack’ (*yūqa‘ ṣawtan ma‘a naqra*), and its absence here suggests that it is equally possible that these specifications are merely redundant arithmetic. In any case, the mnemonic representation suggests that the normal realization of the cycle would be:

> x Ẋ . x . / x . x . x . /
> x Ẋ . X . / x . x . X . //

fol. 11r
A separate section is then devoted to the two *far‘* , the distinctive attacks of which are placed at time units 6, 10, 17 and 21:

> o . . o . x . o . x . /
> o . . o . x . o . x . //

As noted above, there is no cycle of 22 (or 11) time units in the al-Urmawī corpus, although we again have the tenuous connection that both Ibn Kurr's *ṯānī ṯaqīl* and al-Urmawī 's *ṯaqīl ṯānī* begin with *tanan* . But, as before, while the latter continues with another *tanan* , the former reverts to the more normal string of duple elements.
fol. 12r

3.4.5 **muḫammas ṭawīl** *('long fivefold')*

This cycle is defined as consisting of (20 *rāh* or) 40 time units, made up of four (equal) quarters of five *rāh* , whence, according to Ibn Kurr, the name *muḫammas ṭawīl* ('long fivefold'). [53] There is then a comment on its relationship with *fāḫta* (which will be considered together with the description of this 20 time unit cycle), followed by an asymmetrical presentation in mnemonic terms:

> *tan tan tan tan tan ,*
> *tan tan tan tan tan ,*
> *tan tan tan tan tan , tan tan tan tan tan ,*

However, there is nothing to indicate that this is intended to convey more than the division into quarters.

Ibn Kurr again invokes *fāḫta* in relation to the status of *muḫammas ṭawīl* as an *aṣl* , something not mentioned in relation to the preceding cycles, presumably because there was no doubt about it. In this case the justification given for *aṣl* status is that *muḫammas ṭawīl* has two *far'* that are not identical with *fāḫta* , in other words that it is a structurally distinct entity and not one simply produced by repeating another cycle.
fol. 12v
It also has *māšī* and *muḫarrak* variants (referred to in 3.5.1.4 and 3.5.2.5 respectively).

We are told next that the two distinctive attacks are situated at time units 29 and 39, and a separate section is then devoted to the two *far'* , the distinctive attacks of which are placed at time units 13
fol. 13r
and 19, and 33 and 39 respectively:

```
o . o . o . o . o . o . x . o . o . x . /
o . o . o . o . o . o . x . o . o . x . //
```

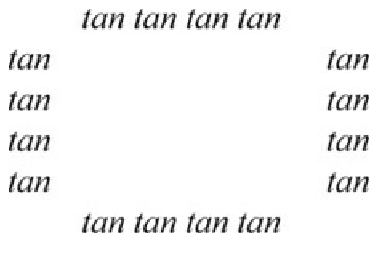
We have, accordingly, as with the previous cycle, identical halves.
fols 13v–15r

3.4.6 **al-sittat 'ašarī yu'īd al-muḫammas al-qaṣīr** ***('cycle of 16*** **[rāh]** ***repeating the short fivefold')***

muḫammas qaṣīr *('the short fivefold')*

The first of the next two cycles, as its name proclaims, is the double of the second, and Ibn Kurr underlines the relationship by saying that two cycles of *muḫammas qaṣīr* equal two *far'* of *yu'īduh* . We may therefore consider them together.

As its name indicates, *al-sittat 'ašarī* consists of 16 *rāh* = 32 time units. We are told that it contains four quarters, and the layout of the mnemonic syllables makes this explicit:


tan tan tan tan
tan *tan*
tan *tan*
tan *tan*
tan *tan*
tan tan tan tan

This is the only case in which we have a deliberate attempt to represent visually something approaching the circular form of navigation given by al-Urmawī (and the absence of any form of circular diagram is yet another indication that Ibn Kurr was unfamiliar with Systematist literature). That we are to read in an anticlockwise circular sequence is underlined by the direction of the script, the left column having to be read downwards, the right upwards, and with the bottom line written upside down. [54]

The two distinctive attacks are situated at time units 23 and 31. Accordingly, the cycle may be represented as:

```
o . o . o . o . / o . o . o . o . / o . o . o . X . / o . o . o . X . //
```

As *muḫammas ṭawīl* consists of 40 time units, one might have expected *muḫammas qaṣīr* , its 'short' equivalent, to have 20, or even, possibly, 10, but as is evident from the above
fol. 14v
it contains (eight *rāh* or) 16 time units, and later in the text it is actually referred to as *ḍarb al-ṯamāniya* ('the rhythm of eight [*rāh*]'). Like *al-sittat 'ašarī* it contains four quarters, and the presentation in mnemonic terms is a straightforward linear 4 + 4 + 4 + 4:

> *tan tan , tan tan , tan tan , tan tan*

The two distinctive attacks are situated at time units 11 and 15. There is no mention of halves, and nothing further is said about the quarters, but on the basis of the division suggested by the mnemonic syllables it may be represented as:

o . o . / o . o . / o . X . / o . X . //

fol. 15r

It is from the five *rāh* that precede the first attack that, according to Ibn Kurr, the name *muḫammas* derives, referring back to a statement made during his discussion (*fol. 13v*) of the *muḥarrak* of *muḫammas ṭawīl*, which offers the observation that *muḫammas qaṣīr* is termed 'fivefold' because of the initial five *rāh* before the *īqāʿ* (the first of the two distinctive attacks), and that only *muḫammas qaṣīr* is noted for this feature, even if it is also found in *ḫusrawānī*. This claim seems rather less plausible than his derivation of the name in the section on *muḫammas ṭawīl* from the five *rāh* that constitute each quarter.

A further connection between *al-sittat ʿašarī* and *muḫammas qaṣīr* is that their respective sections both begin with a statement identifying them as a form (*nawʿ*) of another cycle. In the case of *al-sittat ʿašarī* this is *ṯaqīl awwal*, and in that of *muḫammas qaṣīr* it is *ṯaqīl ṯānī*. This common feature of being connected in some way to another, longer cycle is presented without explanation, and may usefully be reviewed in conjunction with the other statements on such relationships cited above, principally in 3.4.2. We have been told, in all, that:

2 × *ṯānī ṯaqīl* (= 2 × 22)= 2 *farʿ* of *awwal ṯaqīl* (= 2 × 22)
2 × *muḫammas qaṣīr* (= 2 × 16) = 2 *farʿ* of *al-sittat ʿašarī* (= 2 × 16)
1 × *ḫurāsānī* (24)= 2 *farʿ* of *al-sittat ʿašarī* (= 2 × 16)
muḫammas qaṣīr (16) is a type (*nawʿ*) of *ḫurāsānī* (24)
al-sittat ʿašarī (32) is a type (*nawʿ*) of *ṯaqīl awwal* (48)

Thus alongside the equality of the first two cases we are presented with assertions of equality between entities the time unit totals for which stand in ratios of 2 : 3 and 3 : 4, and whatever form of musical logic lies behind these statements is probably to be sought in the disposition of elements within the cycles. Thus both *al-sittat ʿašarī* and *ṯaqīl awwal* can be viewed as compounds of four equal elements (of eight time units in the first case, 12 in the second), while the time units separating their distinctive attacks stand in a 4 : 3 ratio, but if comparison cannot be pursued further in this case, we find with *muḫammas qaṣīr* and *ḫurāsānī* an additional form of resemblance, for the *farʿ* structures of both are analogous in that they consist of a number of /o . / elements followed by final /x . x . /, on which basis the former could be regarded as a reduced (acephalic) form of the latter.

It is with the *farʿ* structures of *muḫammas qaṣīr* that the following section is concerned. The attacks for the first *farʿ* occur at time units 5 and 7; and for the second at time units 13 and

fol. 15v

15, thus producing something approaching a diminution of the complete cycle as defined by its two distinctive attacks:

o . o . x . x . /
o . o . x . x . /

The text continues with sections on the *māšī*, *muḥarrak* and *šanbar* forms of both *muḫammas qaṣīr* and *al-sittat ʿašarī*, followed by

fol. 16v

3.4.7 fāḫita

Given that al-Urmawī singles out *fāḫita* as a cycle favoured by Persians, it might be expected that the further west one went the less it would be known. Yet it is with *fāḫita* that we at last encounter a cycle not merely where the name is common to both al-Urmawī and Ibn Kurr, but one where they concur with regard to the total number of time units, 20. Beyond that, though, they again diverge.

Ibn Kurr prefaces the name, in addition to the habitual *ḍarb*, with *aṣl* (so that it becomes *aṣl ḍarb al-fāḫita*), which may be taken as an indication of the presence of an unusual feature, and a distant echo of the comment on *fāḫita* introduced shortly after the initial definitions. This states its *aṣl* to be a cycle formed of two cycles of *fāḫita* that is not divisible into quarters. In short, we seem to be offered a casuistic defence of the status as *aṣl* of a cycle that, exceptionally, does not fulfil the requirement of being divisible into (normally equal) halves, *farʿ*: the problem is solved simply by doubling it. Why it cannot be so divided is made clear by the mnemonic representation:

tanan tanan tan tinin tinin [55] *tan tan tan*

The suggestion of an internal 8 (3 + 3 + 2) + 8 (3 + 3 + 2) + 4 (2 + 2) articulation – one quite different from al-Urmawī's symmetrical 10 (4 + 2 + 4 or 2 + 4 + 4) + 10 – is clearly strengthened by the vowel change, beginning at time unit 9, that indicates a change of timbre and/or dynamics. Ibn Kurr had earlier (*fol. 9r*), in discussing a variant of *ḫurasānī*, introduced a distinction between the use of the vowel *a* (as in *tan*) to indicate a sound (*ṣawt*) that is high or sharp (*ḥādd*), and the vowel *i* (as in *tin*) one that is low or soft (*layyin*).

The two distinctive attacks within the cycle of 20 are situated at time units 13 [56]

fol. 17r

and 17:

o . o . o . o . / o . o . X . o . / X . o . //

and one may note that the latter is not, as in all previous cases, the penultimate time unit (so that the standard concluding formula referring to the final time unit as a ‘duration pending’ has to be expanded, consisting now of the final *rāh* and the second time unit of the penultimate one).

Equally unusual are the positions indicated for the attacks in the following section dealing with the two *far‘* . Each of these, according to the information hitherto imparted, should consist of a whole cycle of 20 time units, yet Ibn Kurr now blithely ignores the problem of dividing *fāḫta* as a cycle of 20 time units into (presumably equal) halves by proceeding to do precisely that: each *far‘* has 10 time units. Moreover, he supplies each with three attacks rather than the normal two, and places them in unprecedented positions: the beginning of the first, second and fourth *rāh* for the first *far‘* , and the sixth, seventh
fol. 17v
and ninth for the second, yielding:

x . x . o . x . o . /
x . x . o . x . o . //

Further, having given the first *far‘* in these terms (and before defining the second), he proceeds to call it ‘the *fāḫta* cycle (*dawr*) that is a *far‘* of this *aṣl* ’, and he concludes with yet another indication of indeterminacy: the last *rāh* is a duration pending not just the next cycle but the next two cycles, presumably two of the *far‘* cycle of 10 time units. All this suggests that the name could be used flexibly for entities of either 10 or 20 time units, with two of the latter also forming a larger (and possibly primarily theoretical) entity devised to overcome problems about applying the term *aṣl* to the cycle of 20, problems that are here simply ignored or, perhaps, suppressed, for the final remark reiterates with seemingly unnecessary emphasis that the two *far‘* are the *far‘* of the *aṣl* of 20 time units. [57]

The 2 + 4 + 4 layout of each does not, though, match the internal structure indicated by the mnemonic representation of the cycle of 20 time units. There is no obvious connection between them, and despite the somewhat fluid relationships between the various structures of 10, 20 and 40 time units it would be a little far-fetched to suggest that 2 + 4 + 4 could be a subdivision of a basic 6 + 4 perceived as an augmented form of the 3 + 2 segment of the cycle of 20. On the other hand, the 2 + 4 + 4 subdivision does, interestingly, coincide with one of the distributions of attacks noted by al-Urmawī , and another area of resemblance, if vaguer, concerns further flexibility of length: al-Urmawī mentions in addition an extended form consisting of 28 time units, and although Ibn Kurr does not recognize this total, he does, in the following section on the *māšī* variant, refer to two additional *rāh* , making a total of 24 time units.

There is a yet further oddity: having stated earlier (*fol. 6v*), that the double cycle of 40 time units had two characteristic attacks (without, however, specifying their positions), Ibn Kurr adds that, in contrast to the other cycles classed as *aṣl* , the portion following the first attack cannot be considered a *far‘* . This, he says, will be clarified in due course, but it appears not to be, and as it stands it appears to suggest no more than that the first attack was not situated at the end of the first half (presumably time unit 19), but to the extent that one would not expect it to be, it is redundant information. In addition, and much more peculiarly, it implies that what follows the first of the two characteristic attacks in other cycles can be considered a *far‘* , which flies in the face of the evidence of the preceding cycles. Moreover, as will be seen later, there is such thing as a cycle with two unequal *far‘* .

Even if we ignore this last logical dilemma as an unimportant distraction, it is clear that Ibn Kurr is making a number of apparently inconsistent claims. Considered in conjunction with the variability in length noted by al-Urmawī , these suggest that, like *muḫammas, fāḫta* was an umbrella term subsuming a variety of structures, and differed from it only in the absence of further indications to separate these out. If we take as our primary criterion time unit totals, the relationship between the various manifestations of *fāḫta* discussed here is clear, whereas that between *muḫammas ṭawīl* and the other *muḫammas* cycles is not. But that is to ignore the complication of the existence of a longer variant, and the situation is further confused by the discrepancy between the internal structure suggested by the distribution of attacks indicated for the *far‘* forms and that shown by the mnemonic representation.
fol. 17v

3.4.8 turkī

The next cycle to be introduced is one that is absent from al-Urmawī ’s treatises, although a cycle of the same name is cited and described by Šīrāzī . This, however, is an *aksak* form[58] unrelated to that known to Ibn Kurr, whose definition is this time succinct and clear: *turkī* is a cycle of 12 time units, divisible into quarters, for which he gives the following mnemonic representation:

tatan tatan tatan tatan

The two distinctive attacks
fol. 18r
occur at time units 8 and 11. Assuming that *tatan* , in contradistinction to *tanan* , indicates two attacks the second of which is not optional, and superimposing the two distinctive attacks, represented by X, we have:

/ x x . x x . x X . x X . //

There follows, as usual, a section devoted to the two *far‘* . The position of the attacks appears to be given by reference not to time units but to the various instances of the letter *n* , but since 11 of these are required it is clear that the reference cannot be to its occurrence in the mnemonic representation. Rather, we are faced here with another abbreviation, with *n* standing for *naqra* , yielding a normal definition in terms of time units. The resulting structure is:

o . x . x . /
o . x . x . //

which, as in previous cases, points to an accentual pattern completely at variance with that suggested by the mnemonic representation.

There follow sections on the variant forms *māšī* and *muḫarrak* , after which comes

fol. 19r

3.4.9 **ḫusrawānī**[59]

Possibly as a result of a vague phonetic similarity that suggested a derivational relationship, this cycle is first defined as three quarters of *ḫurāsānī*, and then, continuing a theme that preoccupied Ibn Kurr during his exposition of *fāḫta*, is curtly stated to be an *aṣl* because it has two *far'*. There is then a specification of the number of time units, 18 (which is indeed three quarters of the 24 of *ḫurāsānī*), accompanied by the statement that it is not divisible into quarters (unexpected, perhaps, but not obviously redundant, since it has been seen that quarters do not have to be equal). The following mnemonic representation is an undifferentiated string of nine *tan* syllables, and the two distinctive attacks are assigned to time units 11
fol. 19v
and 17:

```
/ o . / o . / o . / o . / o . / X . / o . / o . / X . //
```

The next section, as usual, defines the two *far'*: the first has its two distinctive attacks at time units 7 and 11, the second at time units 13 and 17:

```
o . o . o . x . o . x . /
            x . o . x . //
```

For the first time, then, we have an unequal division, the first *far'* consisting of 12 time units, the second of six, and given that both can be divided by two it is presumably the imbalance between them that triggered the remark about the impossibility of dividing the cycle into quarters.

3.4.10 **warašān**

For al-Urmawī this is an alternative name for *ṯaqīl awwal*, with 16 time units, while in its later Anatolian manifestation it has 12.[60] Ibn Kurr recognizes neither total: he defines it straightforwardly as consisting of (seven *rāh* or) 14 time units
fol. 20r
and then, repeating the wording used for *ḫusrawānī*, states that it is an *aṣl* because it has two *far'*. Rather less surprisingly, he again remarks that it is not divisible into quarters, and then adds that it is a truncated (*muḫtaṣar*) form of *muḫammas*, omitting one *rāh* from the area preceding the (first) attack in *muḫammas*. The reference is clearly to *muḫammas qaṣīr* of 16 time units, for which the distinctive attacks occur at time units 11 and 15. This suggests the following derivation:

```
               / o . o . o . o . o . X . o . X . //
→ *warašān*      / o . o . o . o . X . o . X . //
```

and the later specification of the distinctive attacks of *warašān* does in fact confirm that they occur at time units 9 and 13. The mnemonic representation, not surprisingly, points to a quite different internal structure, 6 + 8:

tan tan tan tan tan tan tan

There follows the expected section devoted to the two *far'*.
fol. 20v
The distinctive attacks of the first occur on time units 3 and 5, and those of the second on time units 11 and 13. This suggests that the division between the necessarily asymmetrical parts (accepting that the basic unit of measurement is the *rāh*) occurs after time unit 6, which would conform with the structural break indicated by the mnemonic representation, so that we have:

```
      o . X . X . /
o . o. X . X . //
```

There are two further sections before we reach the final part of the first *muqaddima*, which presents a series of general propositions not specific to any one cycle. Both deal with another cycle, but neither is called *ḍarb*, suggesting, perhaps, that they were rather marginal entities. The first, indeed, is specifically called a particular version of *muḫammas qaṣīr*, and this will be considered below in conjunction with the other variants. The second, called 'three quarters of *muḫammas*', is equally clearly an offshoot of *muḫammas qaṣīr*, but it would seem reasonable to regard it rather as an autonomous structure, in parallel with *warašān*, which for Ibn Kurr is also derived from *muḫammas qaṣīr*, and consider it here.
fol. 21v

3.4.11 **niṣf wa-rub' al-muḫammas** *('three quarters of the fivefold')*

As *muḫammas* (*qaṣīr*) consists of 16 time units, this, predictably, is a cycle of (six *rāh* or) 12 time units, and the assumption that these would equate with the last three quarters of *muḫammas qaṣīr* is confirmed
fol. 22r
by the positioning of attacks at time units 7 and 11 (as against the two distinctive attacks of *turkī*, which are at 8 and 11):

```
o . o . / o . x . / o . x . //
```

Ibn Kurr fails to qualify these attacks as *fawāṣil*, but it is not clear what significance, if any, attaches to this omission.

The mnemonic representation, in contrast, does not tally with this cycle being simply a truncated form: using only *tin* syllables, it appears to have a quite distinct structure as well as character:

> *tin tin tin , tin tin tin ,*

The distribution thus suggests an internal 6 + 6 arrangement, possibly, therefore, a re-articulation of the above hypothetical derivation as:

> o . o . o . / x . o . x . //

with a subsequent filling out (representing *tin* syllables by *x* .) to:

> */x . x . x . / x . x . x . //*

although the uniform flow of attacks gives no indication of how the identity of the whole cycle would have been established, let alone the half; and nor is there any explanation for the change of timbre.

There are, Ibn Kurr then tells us, some compositions in this cycle, almost as if this were a matter of some surprise; and he continues by informing us that, not having *far‘*, it is not an *aṣl*. But why it fails to have them is not vouchsafed: it certainly cannot be because of the relative brevity of the cycle, since its equal in this respect, *turkī*, does have *far‘* forms. In any event, their absence is an equally clear indication of the marginal status of this cycle.

Finally, we are told that *niṣf wa-rub‘ al-muḫammas* belongs to the set of technical terms (*muṣṭalaḥāt*) – yet (again) it is not an *aṣl*. The technical terms in question are, presumably, the names of the other rhythmic cycles: it is as if its autonomous status needs to be reasserted yet, once granted, has to be, if not denied, then at least weakened.

3.5 Variations

The above accounts of the individual cycles, for all their detail, are in most cases incomplete, for additional to the material discussed so far are the descriptions Ibn Kurr provides of three forms of variation. A general survey of his repertoire of rhythmic cycles will thus need to be deferred until after a review of the forms of variation, which in some cases differ markedly from the basic forms already presented.

The one he mentions first, presumably because it occurs in the greatest number of cycles, is *māšī* (‘going, walking’), but despite its fortuitous semantic equivalence to *andante*, there is no indication that it might have anything to do with an alteration of the underlying tempo. It later designates a separate cycle,[61] but for Ibn Kurr it appears to refer to a particular form, or process, of variation that affects the surface realization.

3.5.1 **māšī**

The majority of cycles could be subject to this form of variation, but a given type of *māšī* may be shared by more than one. The cycles where it fails to be mentioned are *ṯaqīl awwal, awwal ṯaqīl, warašān*, and *niṣf wa-rub‘ al-muḫammas*, and the omission presumably means that it was not applied to them.

The following survey may best begin with the simplest and clearest definitions, which are those given for *turkī* and *muḫammas qaṣīr*.
fol. 18v

3.5.1.1 turkī
For this 12 time unit cycle Ibn Kurr specifies 8 attacks with, in the first quarter, one on each of time units 1 and 2 and none on the final third time unit, which is a ‘duration pending’. The attacks in the other quarters are distributed in the same way, so that we have in all:

> xx . / xx . / xx . / xx . //

This, it may be noted, corresponds exactly with the mnemonic representation:

> *tatan tatan tatan tatan*

fol. 15v

3.5.1.2 muḫammas qaṣīr
Here three attacks are specified, beginning on the first of a group of four time units, with the fourth a ‘duration pending’ the next group. One proceeds thus recurrently throughout the 16 time unit cycle, represented mnemonically as:

> *tanatan tanatan tanatan tanatan*

As the representation *tatatan* would be highly unusual, there is no strong reason to think that the contrast between *ta* and *na* indicated a differentiation between the attack on the second time unit in each quarter and those surrounding it. The above may be deemed equivalent, therefore, to:

> /xxx . / xxx . / xxx . / xxx . //

fol. 11v

3.5.1.3 ṯānī ṯaqīl

Not quite as explicit is the definition offered in relation to this 22 time unit cycle. There are 12 attacks, three to each quarter, but in the description of the first, which consists of five time units, only two are mentioned, with the first being initial in a group of three letters, *tanan* , echoing, therefore, the mnemonic representation. Presumably, then, the second attack occurred on the second time unit, and the third, which fails to be mentioned, on the fourth, being initial in the remaining *tan* element (thus yielding /x x . x . / for the quarter). The description of the second quarter, in contrast, is quite specific: there is an initial attack in each *rāh* , with a timbral distinction represented by the syllables *tin tin tan* . The third and fourth quarters are identical with the first and second respectively, so that we have:

xx. x. / *x* . *x* . x. /
xx. x. / *x* . *x* . x. //

fol. 13r

3.5.1.4 muḫammas ṭawīl

The same form of timbral distinction is noted here too. There is an initial attack in each one of its 20 *rāh* , and the quarters are identical, but differentiated internally thus:

tin tin tin tin tan

corresponding, therefore, to:

/*x* . *x* . *x* . *x* . x. /

fol. 15b

3.5.1.5 al-sittat ʻašarī

Here there are initial attacks not in the first but in the second,
fol. 16a
third and fourth *rāh* of each quarter with, again, a timbral distinction represented by:

tin tin tan

The quarters may thus be represented as:

/o . *x* . *x* . x. /

In a final remark, Ibn Kurr qualifies this as the opposite of the *māšī* form of *ḫurāsānī* (which he had already discussed).
fol. 8v

3.5.1.6 ḫurāsānī

This has 12 attacks, each one initial in a *rāh* , which seems to suggest, as *ḫurāsānī* consists of (24 time units or) 12 *rāh* , an uninterrupted flow of attacks throughout the cycle. However, we are told that the first attack is not in fact at the beginning of the cycle, but is initial in *rāh* 3, the final one of the first quarter. The attacks are described first as ‘a soft (*layyin*) *tin* ’, followed by another, and then again
fol. 9r
as *tin tin* .[62] No position is specified, but they are presumably to be associated with *rāh* 3 and *rāh* 4, which begins the second quarter, continuing thus through the remainder of the cycle. There follows the complementary assertion that the *māšī* form of *ḫurāsānī* is the opposite of that of *sittat ʻašarī*, and this time Ibn Kurr provides an explanation, albeit one that hardly clarifies the nature of the contrast: when you reach the end of the fourth quarter of *ḫurāsānī* it takes you on (*daḫal maʻak*) for two *rāh* into the beginning of the following cycle. From this one may deduce the following structure:

o . o . *x* . /*x* . *x* . *x* . /
x . *x* . *x* . /*x* . *x* . *x* . // *x* . *x* .

which has the full complement of 12 attacks. It appears, therefore, that the even flow of attacks that constituted the *māšī* of *ḫurāsānī* was characterized not just by its consistency but also by its position, being an injection after the beginning of one cycle and concluding after the beginning of a subsequent one. It is possible that it is this feature that underlines Ibn Kurr’s assertion of difference (although one that hardly justifies calling it the opposite) to *sittat ʻašarī*, with its quarters of /o . *x* . *x* . x . / that, despite lacking attacks at the beginning, do not spill over into the next, indeed are emphatically marked as terminating within the quarter by the shift from *tin* to *tan* for the last attack.

It is in his concluding remark to this section that Ibn Kurr introduces the distinction between the vowels *a* , for a sharp or high (*ḥādd*) sound, and *i* , for a soft or low (*layyin*) sound.
fol. 17v

3.5.1.7 fāḫta

There is no mention of a *māšī* form specific to this cycle, rather, we are told that if one is wanted that of *al-sittat ʻašarī* can be used. As *fāḫta* has only 10 *rāh* a further two are added, so that it becomes three quarters of *sittat ʻašarī*, thus yielding, presumably:

/ o . *x* . *x* . x. / o . *x* . *x* . x. / o . *x* . *x* . x. //

fol. 19v

3.5.1.8 ḫusrawānī

Here the definition is even briefer: the *māšī* form of *ḫurāsānī* is used because *ḫusrawānī* is an abbreviation (*muḫtaṣar*) of it (thereby echoing the initial description of *ḫusrawānī* as three quarters of *ḫurāsānī*). Assuming that the particular features characterizing the *māšī* form of *ḫurāsānī* are retained, this implies deleting one of the quarters after the first, yielding:

> o . o . *x* . /*x* . *x* . *x* . / *x* . *x* . *x* . // *x* . *x* .

3.5.2 **muḥarrak**

This second type of variation appears to have been of lesser importance, or of lesser extent: it is recorded for fewer cycles, is generally shared between two or more, and the definitions given for it are, with one significant exception, markedly briefer.

fol. 9r

3.5.2.1 ḫurāsānī

For this cycle the definition mentions merely an attack initial in a *rāh*, for which the mnemonic given is *tan*, an attack initial in another *rāh*, with the mnemonic *tin*, an attack initial in another *rāh*, with the mnemonic *tā*, and an attack initial in a following *rāh*, with the mnemonic *tin*. No explanation is given of the difference between *tan* and *tā*, and it is difficult to discern what this might be, since in both cases the obvious presumption is that what is indicated is an attack in one time unit followed by a second time unit not marked by an attack: possibly yet another distinction of timbre and/or dynamics was involved. The formulation does not require that the first *rāh* mentioned be the first in the cycle, nor is it stated explicitly, for any of the three subsequent *rāh*, that it follows immediately after the preceding one. Nevertheless, it seems reasonable to conclude from the absence of any reference to intervening pauses that this was the case. The result, marking the *tā* element in bold, is a pattern of four successive attacks spread over eight time units:

> /x . *x* . **x** . *x* . /

forming a unit that would need to be repeated twice to complete the cycle, thereby dividing it into thirds in contrast to the previously established quarters. However, as Ibn Kurr supplies no further information we have no means of knowing whether it was used in this way, or whether a unit was injected occasionally, possibly at various points in the cycle, in order to provide momentary contrast.

However it is interpreted, it is the *ḫurāsānī* form of *muḥarrak* that is said to be used in the following three cycles:

fol. 18v–19r

3.5.2.2 turkī

Here, again, it does not match the cycle, and would need to be performed three times to coincide with the 24 time units of two cycles of *turkī*. There is an additional following remark, but this refers to the remaining variant, *šanbar*, rather than to *muḥarrak*, and will be considered below.

fol. 19v

3.5.2.3 ḫusrawānī

As with *māšī*, the reason given for using the *ḫurāsānī* form of *muḥarrak* is that *ḫusrawānī* is an abbreviation (*muḫtaṣar*) of *ḫurāsānī*. However, given that it has 18 time units the lack of fit is far more pronounced: the *muḥarrak* unit would need to be performed nine times to coincide with the cycle (9 × 8 = 4 × 18), a strong indication of the correctness of the conjecture that it could be injected on occasion for variety within a cycle without having to fill it or, if repeated, possibly even without respecting its boundaries.

fol. 11v

3.5.2.4 ṯānī ṯaqīl

Here we have yet another instance of multiples of the *muḥarrak* unit not equalling one cycle – in this even more extreme case it would need to be performed 11 times to coincide (11 × 8 = 4 × 22). However, we are told that *ṯānī ṯaqīl* has another *muḥarrak*, one that it again shares with *ḫurāsānī* and *turkī*,[63] and this time it appears to provide a simple fit, for it has the same time unit total, 11, as half the *ṯānī ṯaqīl* cycle. However, the mnemonic representation of its measure (*mīzān*) suggests a quite different distribution of attacks:

half *ṯānī ṯaqīl*	*tanan tan tan tan tan*
muḥarrak	*tata tatan tatan tatan* [64]

That it had also acquired a certain autonomy is indicated by the fact that, uniquely, it is named; indeed, it has two names: *ḥarbī* (‘military’), because, we are told, it is used in war,

fol. 12r

and *‘urayjā’* (‘limping’),[65] because it limps (*‘araj*) from *ḫurāsānī* towards *turkī*. Its relationship to the other two cycles is thereby reaffirmed, and the nature of that relationship is then clarified by the following explanation. It is because:

> the beginning of *ṯānī ṯaqīl* resembles the beginning of *turkī*;
> the beginning of the second half of *ṯānī ṯaqīl* [resembles] the beginning of
> the second half of *turkī*; and

the remaining duration of *ṯānī ṯaqīl* [consists] of the *rāḥāt* of *ḫurāsānī*.

As both the first and second halves of *ṯānī ṯaqīl* begin *tanan* and both the first and second halves of *turkī* begin *tatan* ; and as the remainder of *ṯānī ṯaqīl* is *tan tan tan* , which echoes exactly the distribution of attacks in a quarter of *ḫurāsānī*, at issue is not the veracity of these statements but their explanatory adequacy. The derivation of *‘urayjā’* first suggested points to an intermediate stage between *ḫurāsānī* (*tan tan tan / …*) and *turkī* (*tatan tatan …*), focusing therefore on the initial *aksak* element of the latter, since otherwise one would just have a straightforward increment, with no intermediate ‘limp’, from *tan* cells to *tatan* cells. We thus have *tan* (two time units) > *tata* (two time units) > *tatan* (three time units). This has a certain cogency, and one may suspect that the following set of statements were designed to forge a link with the cycle to which this *muḥarrak* form belongs, *ṯānī ṯaqīl* , for they hardly suffice as the causal explanation they purport to be: the fact that both *ṯānī ṯaqīl* and *turkī* begin in a similar way (*tanan* and *tatan* respectively) does not provide an origin for the initial *tata* of the *muḥarrak* ; and the fact that both halves of *ṯānī ṯaqīl* continue thereafter with *tan* , in common with *ḫurāsānī*, is of dubious relevance.

When introducing this second *muḥarrak* form, the manuscript states that it is ‘one which *ḫurāsānī* and *turkī* share with it’,[66] but there is good reason for thinking that this is intended to refer to their involvement as the cycles between which it is viewed as intermediate, and not to assert that they also made use of it. Simple arithmetic indicates that, rather than being shared, it must have been unique to *ṯānī ṯaqīl* , for an entity of 11 time units would not work at all in the other two cycles.

fol. 16r

3.5.2.5 al-sittat ‘ašarī

The third form of *muḥarrak* is that described in relation to this cycle. It is said to consist of a simple alternation: an initial attack in a *rāḥ* , symbolized as *tan* , is followed by an initial attack on the next one, symbolized as *tin* , and to continue, these are repeated. The text adds that this is also the *muḥarrak* for *muḫammas qaṣīr* , incidentally qualified as *ḍarb al-ṯamāniya* (‘the rhythm of eight’), and for *al-‘išrīnī* (‘the twentyfold’), incidentally qualified as *muḫammas al-arbā‘* (‘the fivefold with the quarters’). Citing quarters is hardly helpful, given that they are such a common feature, but confirmation that the reference is to *muḫammas ṭawīl* , which consists of 20 *rāḥ* , is provided in the section on that cycle, where its *muḥarrak* is defined as that of *al-sittat ‘ašarī* .

3.5.3 **šanbar**

As with *māšī, šanbar* is later attested as an independent cycle, but this time in the Ottoman tradition (in the form *çenber*).[67] However, given the meaning of the term, ‘circle’, there is no necessary connection: it could well have been introduced later as a synonym of *dawr* applied to a specific cycle. For Ibn Kurr it is the third and final variation type, mentioned in relation to three cycles only:

fol. 9r

3.5.3.1 ḫurāsānī

The terse definition is that there is no attack on the first *rāḥ* of each quarter, but attacks on the remaining two, thus yielding for the cycle as a whole:

o . x . x . /o . x . x . /
o . x . x . /o . x . x . //

and that this structure is correct is confirmed by the final statement recognizing the omission (*isqāṭ*) of four *rāḥ* , that is, the lack of an initial attack in them. One may further point to the statement, appended to the section on the *muḥarrak* of *turkī* (*fol. 19r*), that every two cycles of *turkī* equal one of *ḫurāsānī*, because *ḫurāsānī* consists of four *šanbar* , and a *šanbar* of *ḫurāsānī* is a *far‘* of *turkī*, which incidentally confirms the interpretation offered above of the two *far‘* of *turkī* as:

o . x . x . /
o . x . x . //

fol. 16r–v

3.5.3.2 al-sittat ‘ašarī *and* muḫammas qaṣīr

These are treated together in the same section, and the definition for them is almost the reverse: there are attacks on the first two *rāḥ* , but not on next two, and so on. The form for *al-sittat ‘ašarī* is therefore:

x . x . o . o . / x . x . o . o . / x . x . o . o . / x . x . o . o . //

with half of this for *muḫammas qaṣīr* :

x . x . o . o . / x . x . o . o . //

fol. 20v

3.5.4 dā’irat al-muḫammas al-qaṣīr fī al-āla *(‘instrumental form of the short fivefold cycle’)*

A yet further manifestation of variety, but this time restricted to a single cycle, appears in Ibn Kurr’s description of another form of *muḫammas qaṣīr* . Preceding the entry for *niṣf wa-rub‘ al-muḫammas* , this is a substantial but rather opaque account, and the interpretation offered is correspondingly tentative. The difficulties it presents begin already with the heading. That it is not called a *ḍarb* is hardly problematic, as it is a variant rather than an independent cycle, but why *dā'ira* should be preferred to *dawr* is not immediately clear, although that the distinction was not trivial is shown by later remarks alluding to it. Rather more significant, however, is the unexpected fact that it is characterized as an instrumental form, thus providing the only example in the whole corpus of a distinction that had been made during the initial definition of a *rāh* according to which there is, or may be, an attack on each of its two time units in an instrumental realization. As *muḫammas qaṣīr* is defined initially as an undifferentiated series of four pairs of *tan* syllables, implying the possibility of eight successive attacks, one might expect the corresponding instrumental realization to contain more, up to a maximum of 16, even though this would simply exacerbate the problem of distinguishing a cycle from a pulse. But in the event the distinction is not to do with an increase in the number of attacks but in their pattern and the way they are phased in relation to the cycle.

The description begins with yet another unexpected element, the qualification that we are dealing not just with a cycle of 16 time units and eight *rāh*, but one that is characterized as 'well-structured' (*ṣaḥīḥat al-mīzān*). Ibn Kurr will refer later to a category termed *ṣaḥīḥ al-dawr*, but this refers to compositional practice and is seemingly unrelated. In any case, whatever is captured by this phrase the need for its inclusion is nowhere made clear, although given the possibility of adding time units in certain variants of other cycles it could conceivably be no more than a precautionary assurance. Next comes an odd circumlocution, for instead of referring to *muḫammas qaṣīr* as the term of comparison, we are told that this *dā'ira* differs (*muḫālif*) from that of half of *al-sittat 'ašarī*; not only that, but a further novel criterion is introduced: it differs from it 'according to the *rāh* disposition' (*'alā ḥukm al-rāh*), by which we may understand the previously given account, in other words that 'the *rāh* disposition' is nothing other than that of the descriptions of all the cycles given so far. There is then the added qualification that this distinction (*iḫtilāf*) usually only occurs in *muḫammas*, followed by an elliptical but clearly dismissive warning to those who do not know the *rāh* disposition and the correspondence (*muṭābaqa*) to it of the instrumental cycle (*dā'ira*), lest they weary both themselves and others (*ta'ib wa-at'ab*).

We are then told that this cycle (*dā'ira*) can be divided into quarters
fol. 21r
(just like *muḫammas qaṣīr*), and are given a mnemonic representation of its measure (*mīzān*) – another term not used in this context elsewhere – which appears to be synonymous with 'cycle' conceived as a disposition of attacks:

tanan tanan tan , tanan tanā tan

This certainly points to a division into halves, but not to a further one into (equal) quarters, and it is therefore hardly surprising to find that the immediately following discussion of its quarters makes no reference to this structure in either of the versions proposed. The first of these introduces yet another new term by telling us that the 'head' (*ra's*) of the first quarter is the first *t* of the cycle, that of the second the fifth, that of the third the ninth, and that of the fourth the thirteenth. As with *awwal ṯaqīl*, the letters *t* referred to here cannot be those of the mnemonic representation, of which there are only six, but must correspond to time units. The ones enumerated are the 'heads' of the quarters 'according to the cycle disposition' (*'alā ḥukm al-dā'ira*), and they yield a simple division into equal parts, so that if we assume that each 'head' was marked by an attack, we will have:

/ x . o . / x . o . / x . o . / x . o . //

Immediately contrasted with the above is the second version, which is 'according to the *rāh* disposition'. Here the 'head' of the first quarter is at the beginning of the second *rāh*, i.e. the third time unit, that of the second is at the beginning of the fourth *rāh*, i.e. the seventh time unit, that of the third is at the beginning of the sixth *rāh*, i.e. the eleventh time unit, and that of the fourth is at the beginning of the eighth *rāh*, i.e. the fifteenth
fol. 21v
time unit, so that on the same assumption we will have either:

/ o . x . / o . x . / o . x . / o . x . //

or:

o . / x . o . / x . o . / x . o . / x . //[o .]

depending on whether 'head' is understood to be the main point of emphasis irrespective of its position in the quarter, or specifically its beginning, in which case, as with the *māšī* form of *ḫurāsānī*, to complete the fourth quarter requires encroaching onto the next cycle. Ibn Kurr rounds off this passage by stating that the difference (*muḫālafa*) between the *dawr* and the *dā'ira* consequently concerns the 'heads' of the quarters, but without telling us which term equates with which disposition, although the obvious assumption is that it is the latter that relates to *dawr*.

The further description of the *dā'ira* that ensues informs us that it begins with the second attack of the *far'* of the preceding cycle, and as there has been no mention of a division into *far'* (nor, consequently, of the positioning of attacks within them), it would be reasonable to assume that the term of reference is the *far'* of *muḫammas qaṣīr*. However, the disposition of the attacks that are itemized fails to match the *muḫammas qaṣīr* structure, whereas it does make sense in relation to halves of the *dā'ira* 'according to the cycle disposition', i.e.

/ x . o . x . o . / x . o . x . o . //

Thus after the beginning on the second attack of the *far'* (which we may presume to be the first *far'*) of the preceding cycle, we are told that the initial attack of the seventh *rāh* is the first attack of a *far'* which is completed by an attack at the beginning of the next *dā'ira*. If the two *far‘* so defined are placed within square brackets we will have:

/ x. o . [x. o . / x. o .] [x. o . //
/ x. o .] x. o . / x. o . x. o . //

Simply put, we have a displacement or overlap whereby a new structure, again termed *dā’ira*, begins at the fifth time unit of the cycle, and the perception of being out of phase with the cycle boundaries is reinforced indirectly by the following comment that for a complete (*kāmil*) *far‘* – presumably meaning the second of the pair – two cycles are needed. What is perhaps slightly surprising is not the phenomenon itself but the optic: the smaller, final element is regarded as being in the cycle in question while the much larger initial element is regarded as being in the preceding cycle. Ibn Kurr then proceeds to contrast the two types upon the basis of this disposition, drawing a distinction between the *dā’ira*, where a second cycle is needed to complete the *far‘*, and what, to revert to his initial formulation, he terms half of *al-sittat ‘ašarī* ‘according to the *rāh* disposition’, defining it as eight *rāh* (= 16 time units) yielding the duration of a complete *far‘* up to the fifteenth time unit, that is, the *far‘* structure is completed within a single cycle. According to his previous account of *al-sittat ‘ašarī* and *muḫammas qaṣīr*, two cycles of the latter serve as the *far‘* of the former, but it is immaterial whether he is referring to the complete *muḫammas qaṣīr* cycle as a single *far‘* or as itself containing two *far‘*, for in both cases the final attack occurs on the fifteenth time unit.

Ibn Kurr's concluding remarks restate the matter in a slightly different way: he confirms that the placement of the [final] attack according to the *rāh* disposition, on the eighth *rāh* (the fifteenth time unit), is a time unit devoid of an attack according to the cycle disposition, a 'duration pending'; and he adds that the placement of the corresponding attack according to the cycle disposition is the first attack (*naqra*) of a *far‘* that is completed by the second time unit (*naqra*) of [the second *rāh*] of another cycle. [68] If the text is construed in this way the time units specified are in accord with the versions proposed above, the first attack of the second *far‘* in the cycle disposition being the final attack in the cycle, corresponding to that on the fifteenth time unit in the *rāh* disposition:

rāh disposition	/ o . x. / o . x. / o . x. / o . x. //
cycle disposition	/ x. o . /[x. o . / x. o .] / [x. o . //
	x. o .]/x. o . / x. o . / x. o . //

Although the text is uncertain at this point, it is clear that Ibn Kurr is contrasting yet again two realizations of the cycle, one of which is conceived not just in terms of variability but also of displacement.

Even if nothing is said, either elsewhere in the *ġāyat al-maṭlūb* or in Systematist accounts, about the medium in terms of which theoretical accounts of rhythmic cycles were articulated, it can hardly be thought that they were conceived in other than instrumental terms: such distinctions as *tan* vs *tin* point unequivocally in this direction. They could well be understood in relation to contrasts of timbre produced on a percussion instrument, but theorists of this period fail to investigate this aspect, and the evidence of Marāġī cited above suggests that their primary term of reference continued to be plucked string instruments and the contrast of the up and down plectrum strokes. But whatever the form of realization, it is surprising to find Ibn Kurr adding a further and specifically instrumental variant, and it may perhaps best be understood as one that went beyond the bounds of rhythmic variation common to both vocalists and instrumentalists, or as one that exemplified the instrumentalist's prerogative to superimpose a variant out of phase with the voice, which would have adhered to the original structure of the cycle embodied in the composition.
fol. 22r

3.5.5 murakkabāt

The remaining remarks on rhythmic phenomena further emphasize variability and fluidity. This is expressed succinctly but forcefully in the first section after the extended survey of the individual cycles that ends with the presentation of *niṣf wa-rub‘ al-muḫammas*. It introduces briefly yet another category, that of the *murakkabāt* ('combinations'). Said to be numerous, they evidently consisted of bolting together parts of different cycles, by inference equated with the *far‘* divisions. Rather than give an example, however, Ibn Kurr simply states that a *murakkab* is not considered an *aṣl* because it is a part of one to which part of another is conjoined, and that if a *far‘* of it is performed it is deemed a *far‘* of the *aṣl* included in the combination: in other words, a *murakkab* is a secondary, derived entity.

No further information is vouchsafed. We do not know what limits there may have been to combinatorial freedom, but we are certainly afforded here a glimpse of a whole range of further possibilities, even if the opportunity to weld parts of different cycles together may not have been taken very frequently. Also unclear is the context for such a process, and given that the contemporary witness of al-‘Umarī, despite mentioning such specifics as a setting which employs 'the four basic rhythms', [69] contains no reference to a combination of two different cycles, it seems that although performers could freely vary a cycle internally according to the processes described above, this more radical technique whereby it was reconfigured by being spliced to another, perhaps altering the time unit total in the process, was less frequently used. It is true that Ibn Kurr's assertion that there were many *murakkabāt* implies the contrary, but the evidence of al-‘Umarī, who refers to songs where the cycle has a specific number of attacks, [70] suggests that the importance of the pre-composed rhythmic articulation was such that it was not lightly to be tampered with. In any event, the fact that no additional cycle names appear among the compositions he cites indicates that any novel *murakkab* combinations were likely to be performance generated rather than pre-composed, stable entities. It should, though, be noted that some of Ibn Kurr's following remarks imply that a degree of rhythmic alteration was quite acceptable: they suggest, indeed, that the rhythmic structure of a composition could be treated in a rather cavalier fashion. However, most of the following material in the first *muqaddima* could reasonably be held to relate more to style, for the remaining categories listed by Ibn Kurr begin to shift towards what might be termed performance strategies, and the final ones are concerned with what are quite clearly elements of form. Consequently, consideration of this material will be deferred to the next chapter.

3.6 Conspectus

Ibn Kurr's is the most comprehensive account of rhythmic phenomena we have subsequent that of al-Fārābī, and it explores considerably more variations than those listed in Systematist texts. In addition, given the differences between his descriptions of the rhythmic cycles and those of al-Urmawī, it cannot be accounted for as simply a more detailed variant of the Systematist account, still less as parasitic upon it: essentially autonomous, it requires independent examination before the implications of these various contrasts between the two versions can be assessed.

In the previous linear exposition, investigation of the interpretative problems involved has resulted in a rather disjointed narrative, and although certain general issues have been touched upon, an attempt to provide an account of the interrelationships (or lack of them) between the various types and levels was deliberately avoided. Seeking now to cover the ground in a rather more coherent and organized way, we may first consider separately the various categories (number of time units, mnemonic representation, *far'*, etc.), and thereafter the way they are combined cycle by cycle.

3.6.1 Time unit totals

The simplest and least controversial piece of information concerns the number of time units involved. But Ibn Kurr conveys this not by one but by three terms, *ḥarf, naqra*, and *rāh*, which seems at first sight an unnecessarily complication, with two terms for one time unit and one for two. But *ḥarf* and *naqra* are not quite synonymous – alternative terms drawn from different fields – for the former simply defines the time unit as a latent but not yet activated potentiality, while the other generally (but not always) references the attack that activates it. More intriguing is the difference between these and *rāh* or, more precisely, the felt need for an overarching term covering two time units, the first with an attack (actual or potential), the second normally without – a time unit, therefore, that could be described in Ibn Kurr's terminology as 'a duration pending'. It thus appears that the two constitute, in effect, the minimum indivisible unit, but that the *rāh* cannot just be thought of as a reformulation and expansion of the earlier equivalent (instantaneous attack + duration = one time unit) is demonstrated by the fact that in one cycle we are faced with half a *rāh*, while in another, exceptionally, there were almost certainly two attacks within the one *rāh*, and it may be added that acceptance of this possible division is built into the initial definition of the instrumental realization of a *rāh*, even if, paradoxically, it seems to have no purchase on the single exposition of an instrumental variant that Ibn Kurr includes.

The *rāh* of two time units thus remains the dominant measure, and the preference for articulating the dimensions of a cycle by a unit of account larger than a single time unit certainly tallies with the notion of an inflationary trend whereby cycles previously described in terms of *p* units are later described as consisting of 2*p* or even 4*p*. However, whether the time unit totals of the various cycles are considered as multiple in relation to earlier accounts or not, there is no doubt about the numbers given, which range from 12 to 48. Two have 12 time units, and from 12 to 24 all the even number slots are filled (there is no cycle with an odd number of time units), but thereafter we have two gaps of eight (to 32 and 40), and then two of four (to 44 and 48), so that there is no particular numerical coherence about the totals, and certainly no deliberate creation of cycles to fill empty slots. Rather more significant, it might be thought, are the internal alignments, with *awwal ṯaqīl* being twice the length of *ṯānī ṯaqīl* (44/22), *al-sittat 'ašarī* twice the length of *muḫammas qaṣīr* (32/16), as its full name makes explicit, while *niṣf wa-rub' al-muḫammas*, equally explicitly, is three quarters as long (12/16). Further, attention is drawn to a relationship, even if its nature is unspecified, between *muḫammas qaṣīr* and *ṯaqīl ṯānī* (16 and 24, i.e. 2 : 3) and *al-sittat 'ašarī* and *ṯaqīl awwal* (32 and 48, again 2 : 3). But the further extension of the *muḫammas* family to include a *muḫammas ṯawīl* of 40 time units shows that such constellations could also be asymmetrical, and the pairing of *fāḫita* with a double cycle (20/40) is similarly supplemented by a variant with 24 time units, with the result that there is no discernable indication of a conscious and systematic arrangement of parts. On occasion, indeed, the perception of relationships seems to be capricious, as with the suggestion that *warašān* is derived from *muḫammas qaṣīr* (16 → 14). Nevertheless, despite such instances of variability, which indicate that some cycles at least might have been less rigid frameworks than concatenations of elements subject to change or substitution, the fact remains that the number of time units is always the first parameter to be defined, that this initial statement is never formulated as either/or, and that at any given point in the description the length of the cycle is clear.

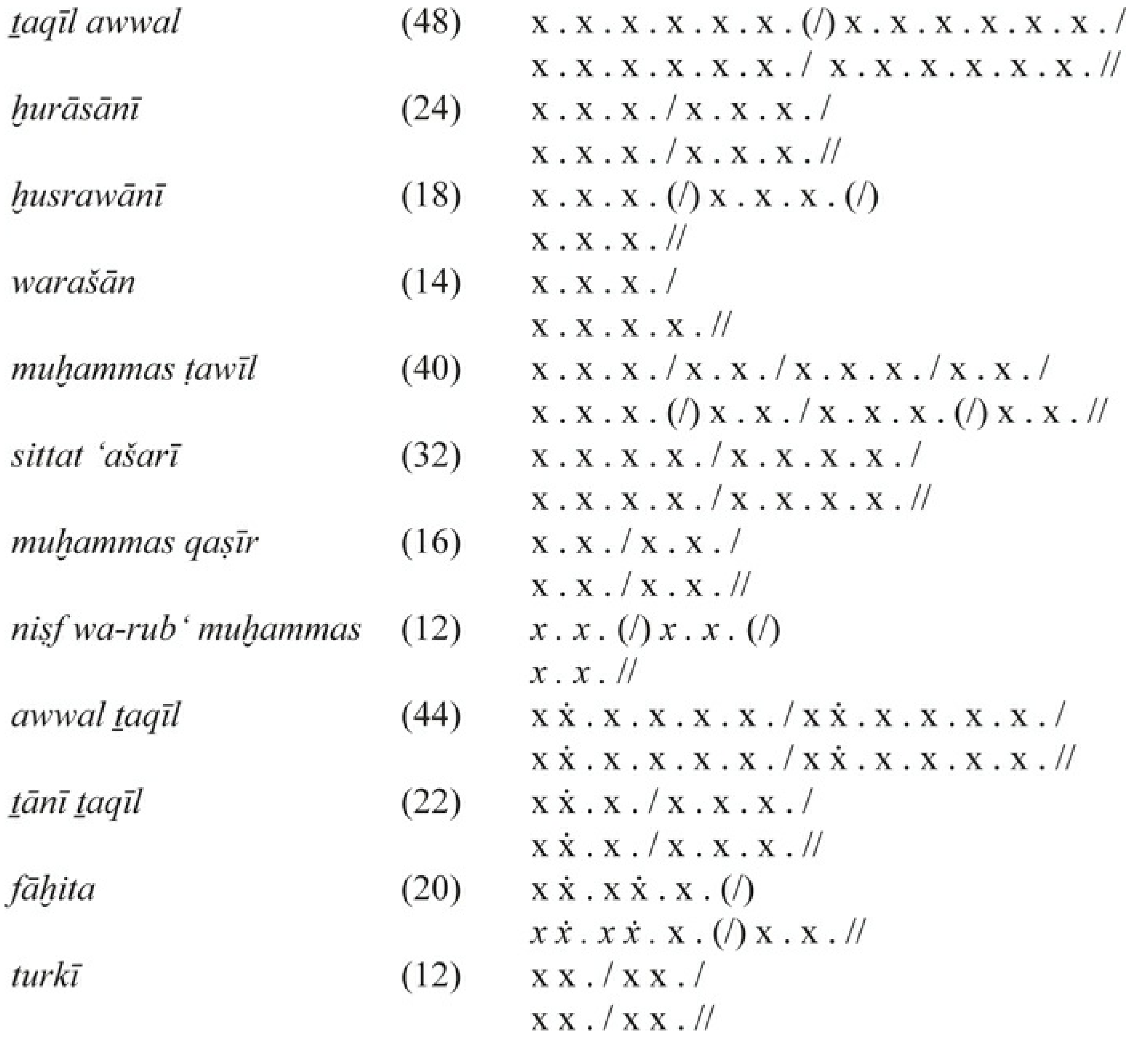
3.6.2 Mnemonic representations

Rather more difficult to discern is the nature of the internal articulation. By opting for prosodic representation in the first instance, al-Urmawī gives some indication of the internal patterns, differentiating optimally between obligatory and optional attacks, and between time units with and without attacks, but such discriminations are less well represented by the mnemonic syllables that Ibn Kurr prefers. For the majority of cycles, indeed, we are given an uninterrupted series of *tan* syllables, which of itself suggests no more than an attack in one time unit and the absence of an attack in the next; and although the syllables may be arranged on the page in such a way as to show internal groupings, there is no indication of the manner in which these would be marked or, where symmetrical, differentiated. In other words, they provide insufficient evidence to shown how a cyclical pattern is established in contrast to a regular, uniform *tan* pulse (or, in the particular case of *niṣf wa-rub' al-muḫammas*, a regular, uniform *tin* pulse). However, that the visual evidence for internal grouping is not adventitious is indicated by the fact that it reinforces, or is at least congruent with, the relationships between certain cycles suggested by their names and explicitly recognized in the text. Thus three of the four *muḫammas* cycles are represented as falling into equal quarters, and the same is true of the longer cycles, *ṯaqīl awwal* and *ṯaqīl ṯānī*, to which Ibn Kurr relates, respectively, *al-sittat 'ašarī* and *muḫammas qaṣīr*. (The odd one out, *niṣf wa-rub' al-muḫammas*, appears, rather, to consist of indivisible halves, and also has the distinct and unique attribute of being represented solely by *tin* syllables.)

Amongst the remaining cycles, a further family relationship obtains between *awwal ṯaqīl* and *ṯānī ṯaqīl*, for both of which the pattern given is *tanan tan tan tan tan*. There remain *turkī*, with *tatan tatan tatan tatan*, and *fāḫita, tanan tanan tan tinin tinin tan tan tan*, and even if evidently more helpful, these representations are also problematic. With *turkī*, for example, we again have iteration of a single element with no indication of how the cycle would be realized so as to be perceived as an entity of 12 rather than three time units; neither is it clear what interpretation should be given to the surely deliberate contrast between the *tatan* of *turkī* and the *tanan* of *awwal ṯaqīl, ṯānī ṯaqīl* and *fāḫita*. The former suggests, if anything, /x x . /, with two obligatory or at least standard attacks in successive time units, so that the latter might be thought to indicate either /x ẋ . /, with the second attack optional, or /x . . /. But whatever the distribution of attacks after the initial one, the structure indicated by the initial 3 + 3 groupings in both *turkī* and *fāḫita* marks them as exceptional in relation to the dominant conception of a *rāh* unit of measurement consisting of /x . /. In addition, the case of *fāḫita* is interesting in that it provides clear evidence for the recognition that a cyclical structure could be assured by means of the contrastive articulation of two parallel blocks, presumably conveyed by distinctions of timbre or/and dynamics. As Ibn Kurr explicitly associates *a* vs *i* with a 'sharp/high' vs 'soft/low' distinction, it is tempting to connect them with what will later be expressed by the contrast of *dum* and *tak*, the low vowel correlating with a duller timbre, the high with a clearer one, and thence to think primarily of relating them to percussion instruments.[71] No further details are forthcoming, however, and one might conjecture that there could still have been some residual consciousness among practising musicians of the earlier conception of contrast as expressed through the down and up strokes of a plectrum,[72] yet both the distribution of the syllables so contrasted in *fāḫita* and the sole use of *tin* syllables in *niṣf wa-rubʿ muḫammas* make it more likely that the *tan* vs *tin* verbal articulation referred in the first instance to differentiated drum strokes. The most likely vehicle would be the frame drum,[73] although in the particular case of the designation of *tat(a) tatan tatan tatan* as *ḫarbī* we may be entitled to see a reflection of patterns performed by the military and ceremonial ensembles on various types of doubleheaded cylindrical drum and kettle drum.

The general distribution of the mnemonic representations of all the cycles is shown in Figure 3.3, which simply reproduces Ibn Kurr's patterns, together with their internal groupings, with the division being placed in brackets where it is suggested visually but not confirmed verbally. An exception is *niṣf wa-rubʿ muḫammas*, where the 6 + 6 division suggested by the mnemonic representation has been relinquished in favour of the 4 + 4 + 4 indicated by its derivation from *muḫammas qaṣīr*. The basic *tan* syllable will now be represented by /x . /, *tanan* by /x ẋ . / and *tatan* by /x x . /. The order of presentation is designed to point up groupings and similarities between cycles. It therefore juxtaposes first *ṭaqīl awwal* and *ḫurāsānī*, which is half as long, followed by *ḫusrawānī*, three quarters of *ḫurāsānī*, and *warašān*, analysed by Ibn Kurr as an apocopated form of *ḫurāsānī*; and then, after *muḫammas ṭawīl*, included here by virtue of its name rather than its structure, *sittat ʿašarī* and *muḫammas qaṣīr*, which is half as long, followed by *niṣf wa-rubʿ muḫammas*, three quarters of *muḫammas qaṣīr*.

We thus have parallel blocks with time unit totals of 48, 24, 18, and 32, 16, 12 respectively. But the former has attached to it, perhaps factitiously, a shorter cycle of 14 (*warašān*), which disturbs the pattern, 4 × 12, 4 × 6 and 3 × 6 being followed by 6 + 8, while the latter has associated with it a longer cycle of 40 (*muḫammas ṭawīl*), which is equally the odd one out, being 4 × (6 + 4) as against 4 × 8, 4 × 4 and 3 × 4, and even if these two are set apart, the core arithmetic symmetry is still somewhat devalued by the different characteristics exhibited by *niṣf wa-rubʿ muḫammas*. The remaining cycles are headed by *awwal ṯaqīl* and *ṯānī ṯaqīl*, a pair in which the second is half as long as the first so that, generalizing the internal grouping indicated for the second, we have 2 × (3 + 2 + 6) and 4 × (3 + 2 + 6). They are further differentiated from the preceding cycles by including an attack, obligatory or optional, on the second time unit, a feature they share with *fāḫita* and *turkī*. In general, one may observe a fairly even distribution between cycles containing only duple constituents (4 and 8) and those containing triple (3 and 6), while a slightly larger group is made up of those combining the two, and with the exception of the 3 + 3 + 2 of *fāḫita* they begin with a single triple constituent preceding a duple. Finally, it may be noted, following Ibn Kurr's analytical approach, that just over half of all the cycles are divisible into equal quarters, and a further one into equal halves, while of the remaining four two are divisible into equal thirds, thus leaving *warašān* (6 + 8) and *fāḫita* 2 × (3 + 3 + 2) + 4 as the only cycles for which the mnemonic representation points to a degree of asymmetry.



ṯaqīl awwal	(48)	x . x . x . x . x . x . (/) x . x . x . x . x . x . / x . x . x . x . x . x . / x . x . x . x . x . x . //
ḫurāsānī	(24)	x . x . x . / x . x . x . / x . x . x . / x . x . x . //
ḫusrawānī	(18)	x . x . x . (/) x . x . x . (/) x . x . x . //
warašān	(14)	x . x . x . / x . x . x . x . //
muḫammas ṭawīl	(40)	x . x . x . / x . x . / x . x . x . / x . x . / x . x . x . (/) x . x . / x . x . x . (/) x . x . //
sittat ʻašarī	(32)	x . x . x . x . / x . x . x . x . / x . x . x . x . / x . x . x . x . //
muḫammas qaṣīr	(16)	x . x . / x . x . / x . x . / x . x . //
niṣf wa-rubʻ muḫammas	(12)	*x . x .* (/) *x . x .* (/) *x . x .* //
awwal ṯaqīl	(44)	x ẋ . x . x . x . x . / x ẋ . x . x . x . x . / x ẋ . x . x . x . x . / x ẋ . x . x . x . x . //
ṯānī ṯaqīl	(22)	x ẋ . x . / x . x . x . / x ẋ . x . / x . x . x . //
fāḫita	(20)	x ẋ . x ẋ . x . (/) *x ẋ . x ẋ .* x . (/) x . x . //
turkī	(12)	x x . / x x . / x x . / x x . //

Figure 3.3 Mnemonic definitions

3.6.3 Distinctive attacks

Of the various parameters discussed by Ibn Kurr apart from time unit totals and mnemonic patterns, the two *fawāṣil* attacks that are considered distinctive markers of each cycle are the only ones that are cited in Systematist accounts, and reference has already been made to the fact that although the proportions they demarcate are generally the same, there could hardly be a greater contrast in their positions: al-Urmawī emphasizes the first one by placing it in nearly every case at the beginning of the cycle,[74] while Ibn Kurr emphasizes the second by placing it in nearly every case on the penultimate time unit. The *fawāṣil* are displayed in Figure 3.4 where, for clarity, all the other attacks suggested by the mnemonic representations are symbolized as o, while *fawāṣil* attacks are indicated by X, except for an exceptional instance in a time unit not *rāh*-initial, which is indicated by x.

As this shows, the first attack only occurs well after the halfway point has been reached, and in those cycles deemed divisible into quarters, as Ibn Kurr expressly states, it is placed on the penultimate time unit of the third. In the majority of cases (from *ṯaqīl awwal* down to *awwal ṯaqīl*, and also *turkī*), we find in consequence the same proportion between the two, the distance from first to second being a quarter of the whole cycle, while in two other cycles the proportions are kept as close as possible to the quarter norm: *ṯānī ṯaqīl* 3/11 and *warašān* 2/7. With regard to these one may note that in *ṯānī ṯaqīl* the first attack is again on the penultimate time unit of the third quarter (this is a cycle with unequal quarters) while in *warašān* the position of the first attack suggests that the internal division, hitherto considered probably to be 6 + 8, might perhaps better be construed as 6 + 4 + 4, so that it occurs on the penultimate time unit of the penultimate segment. A similar situation appears to obtain in *ḫusrawānī*, where the proportion is one third. Theoretically, this could be reduced to 5/18, but to do so would require placing one of the two *fawāṣil* attacks on an otherwise unmarked time unit, a feature that appears nowhere else, and in any case the distribution can be explained more simply by viewing this cycle as *ḫurāsānī* minus its first quarter, but retaining the two *fawāṣil* attacks in their original positions. The resulting structure parallels that proposed for *warašān*, with the first attack on the penultimate time unit of the penultimate segment.

ṯaqīl awwal	o . o . o . o . o . o . (/) o . o . o . o . o . o . / o . o . o . o . o . X . / o . o . o . o . o . X . //
ḫurāsānī	o . o . o . / o . o . o . / o . o . X . / o . o . X . //
muḫammas ṭawīl	o . o . o . / o . o . / o . o . o . / o . o . / o . o . o . (/) o . X . / o . o . o . (/) o . X . //
sittat ‘ašarī	o . o . o . o . / o . o . o . o . / o . o . o . X . / o . o . o . X . //
muḫammas qaṣīr	o . o . / o . o . / o . X . / o . X . //
awwal ṯaqīl	o o . o . o . o . o . / o o . o . o . o . o . / o o . o . o . o . X . / o o . o . o . o . X . //
ṯānī ṯaqīl	o o . o . / o . o . o . / o o . X . / o . o . X . //
turkī	o o . / o o . / o X . / o X . //
warašān	o . o . o . / o . X . o . X . //
ḫusrawānī	o . o . o . (/) o . o . X . (/) o . o . X . //
niṣf wa-rub‘ muḫammas	*o . o .* (/) *o . X .* (/) *o . X .* //
fāḫita	o o . o o . o . (/) o o . o x . o . (/) X . o . //

Figure 3.4 Distinctive attacks

There remain the exceptional, or seemingly exceptional, cases of *niṣf wa-rub‘ al-muḫammas* and *fāḫita*, in which the proportion could theoretically be a quarter but is in fact a third in the first and a fifth in the second. In *niṣf wa-rub‘ al-muḫammas*, given the general distribution of attacks indicated by the mnemonic representation, the quarter relationship would again require one of the two *fawāṣil* attacks to be placed on an otherwise unmarked time unit, and it may reasonably be assumed that this was a determining factor. In *fāḫita*, the same constraint would apply if the second attack were in its normal position on the penultimate time unit, so that this cycle is doubly exceptional, firstly because of the position of the second attack, and secondly because that position actually makes the quarter relationship possible (with attacks on time units 12 and 17 = 5/20). Although the situation is slightly confused by the fact that this is a cycle that does not divide into quarters, but rather into blocks of 8 + 8 + 4, it remains the case that the existing fifth relationship would also occur if the two attacks were placed on the standard penultimate time units of the second and third blocks, so that the fundamentally exceptional feature of this cycle is that it is the only one not to have the second attack on the penultimate time unit. For this no obvious reason suggests itself, but one might speculate that it was shifted back because of a problem with the corresponding penultimate position in the preceding block, namely that if, as is likely, this block was perceived as segments of 3 + 3 + 2, the penultimate time unit is at the same time initial in a segment, and none of the *fawāṣil* attacks in the other cycles occurs in this position. Further, this line of argument has the merit of explaining why the quarter relationship was not created by placing the first attack on time unit 12: this, too, is initial in a segment. But while we may have here a satisfactory explanation for the first attack being placed on the penultimate time unit of the second segment, the implication that, as a consequence, the second attack was in effect repositioned has no more than the attractiveness of parallelism to commend it, for no such shift would be required to remain within the tolerance of the existing deviations from the optimal proportion of a quarter: to have the attacks on time units 13 and 19 yields 3/10, which, although larger than a quarter, is still smaller than the third of *ḫusrawānī* and *niṣf wa-rub‘ al-muḫammas*.

With regard to the latter, it might be added that the deviation from the quarter norm has the incidental advantage of distinguishing it from *turkī*, these being the only two cycles to have the same number of time units. This supplementary point implies, however, that the two distinctive attacks might actually have served by themselves, as Ibn Kurr sometimes indicates, to distinguish one cycle from another. But such would hardly be feasible when the proportion that separates them is the same or nearly the same in nearly all cases: it would, for example, require an unrealistically exact discrimination of tempo to be able to maintain on this basis alone a distinction between *ṯaqīl awwal* (48 time units) and *awwal ṯaqīl* (44). Likewise, it would require a fine discrimination to be able to distinguish, with no further information, between the 3/11 of *ṯānī ṯaqīl* and the 4/12 of *turkī*. The same fundamental problem arises in al-Urmawī ’s account, so that in this respect the congruence between the two authors with regard to the proportions separating the two attacks actually seems more significant that the difference in their relative positions in the cycle. In both cases the conclusion must be that the two distinctive attacks, however semiotically significant they were considered to be, would not have been the sole markers to be employed throughout the performance of a given piece. Either the melody would have been structured in such a way as to identify the cycle readily enough by itself or – and this is surely the more probable conclusion – they might have been introduced on occasion as a stripped-down basic form to provide variety, but only after a fuller form of the cycle had been well established,[75] and that the interlude would only have been temporary is clearly indicated by the formula that Ibn Kurr uses in association with some of his definitions of the *fawāṣil* : they are to distinguish the cycle from the following one, which must, accordingly, have been articulated differently and more fully.

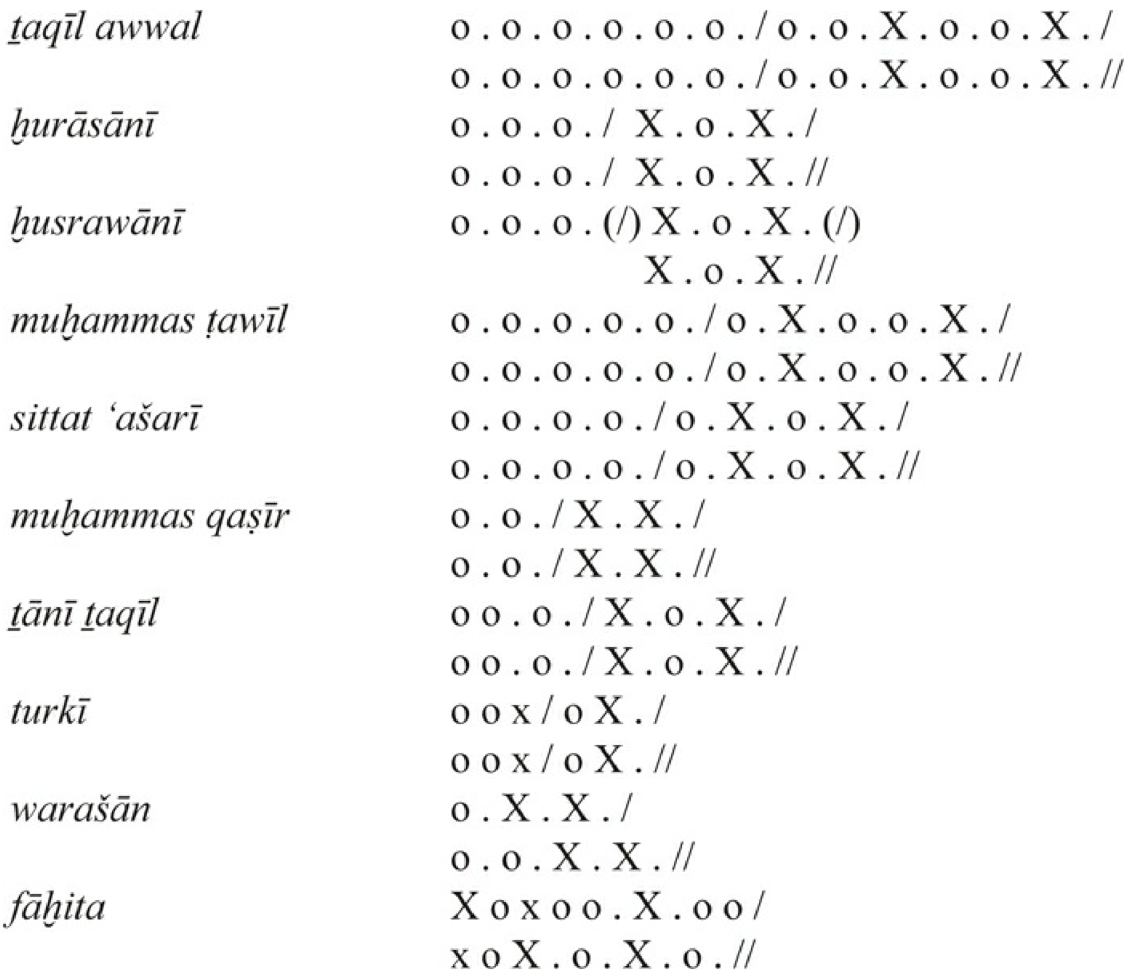
3.6.4 far‘

What that fuller form might have been is, however, not always clear from Ibn Kurr's account, despite his recognition of further variants or processes that the Systematists fail to mention. The mnemonic representations certainly imply a high number of attacks, in most cases about half the time unit total, but, as has been observed, they are otherwise often unhelpful in that they fail to signal the element of asymmetry necessary to the identity of the cycle. Nor are matters helped greatly when we turn to the *far‘* subdivisions, which are introduced with admirable descriptive efficiency: if the cycle is divisible into four quarters each *far‘* occupies a half; and if it is not then the first *far‘* is what precedes the first of the two distinctive attacks and the second is the remainder of the cycle. Unfortunately, the latter part of the definition does not tally with the information given about the individual cycles. In *warašān* , for example, the proportions are correct but the order is wrong: the first distinctive attack divides the cycle into segments of 8 + 6 time units, while the two *far‘* consist of 6 + 8; and in *ḫusrawānī* the proportions are incorrect: the first distinctive attack divides the cycle into segments of 10 + 8 time units, while the two *far‘* consist of 12 + 6.

Of greater concern, however, is to know how the *far‘* were constituted internally, and for Ibn Kurr their structure is generally parallel to that of a cycle as represented by its two *fawāṣil* attacks, so that the total number only rises to four, and as the distribution is also similar there is still no reference to something as basic as an attack on the first time unit; indeed, the *far‘* often approximates to the cycle containing just two *fawāṣil* attacks shrunk to half its length, with the first attack not being registered until the beginning of the second quarter, or even later.

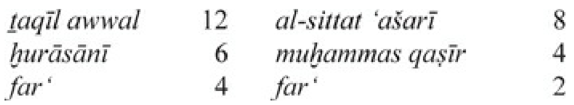
No *far‘* divisions are given for *awwal ṯaqīl* and *niṣf wa-rub‘ muḫammas* . Those for the remainder are presented in Figure 3.5 where, as in Figure 3.4 , the remaining attacks according to the mnemonic representations are indicated by o, while *far‘* attacks are indicated by X, except for the exceptional instances in time units not *rāḥ* -initial and previously devoid of an attack, which are indicated by x.

Two cycles of *ḫurāsānī* (*ṯaqīl ṯānī*) are said to function as the *far‘* of *ṯaqīl awwal* , and the implication of diminution, of the cycle in effect being halved in length and repeated, is borne out by comparing the resulting distribution with that of the two *fawāṣil* attacks in *ṯaqīl awwal* . Similarly, two cycles of *muḫammas qaṣīr* are said to function as the *far‘* of *al-sittat ‘ašarī*, and the process of diminution is repeated with the *far‘* of *muḫammas qaṣīr* , compared with which the *far‘* of *ḫurāsānī* seems exceptional, for taking the number of time units between the attacks, we have:



ṯaqīl awwal	o . o . o . o . o . o . / o . o . X . o . o . X . / o . o . o . o . o . o . / o . o . X . o . o . X . //
ḫurāsānī	o . o . o . / X . o . X . / o . o . o . / X . o . X . //
ḫusrawānī	o . o . o . (/) X . o . X . (/) X . o . X . //
muḫammas ṭawīl	o . o . o . o . o . / o . X . o . o . X . / o . o . o . o . o . / o . X . o . o . X . //
sittat ‘ašarī	o . o . o . o . / o . X . o . X . / o . o . o . o . / o . X . o . X . //
muḫammas qaṣīr	o . o . / X . X . / o . o . / X . X . //
ṯānī ṯaqīl	o o . o . / X . o . X . / o o . o . / X . o . X . //
turkī	o o x / o X . / o o x / o X . //
warašān	o . X . X . / o . o . X . X . //
fāḫita	X o x o o . X . o o / x o X . o . X . o . //

Figure 3.5 far’ divisions



ṯaqīl awwal	12	*al-sittat ‘ašarī*	8
ḫurāsānī	6	*muḫammas qaṣīr*	4
far‘	4	*far‘*	2

However, the exception may be explained by the fact that to arrive at 3 instead of 4 would again require placing an attack on a time unit hitherto devoid of one. Although we are otherwise confronted with a diminution that is strict with regard to proportion, the same avoidance of hitherto void time units means that it is not quite strict with regard to position, retention of the normal location of the second attack on the penultimate time unit in the shorter cycle resulting, in relation to a strict halving of the longer cycle, in both attacks being shifted one time unit back.

Given the dimensions of the *far‘* forms, it is not surprising to find arithmetic determining a reduction in the possible number of instances of the quarter relationship that characterized the two *fawāṣil* attacks, so that it appears, in fact, only in *ṯaqīl awwal, sittat ‘ašarī* and *muḫammas qaṣīr*. However, where it cannot be achieved, or could only be achieved by placing an attack on a time unit hitherto devoid of one, we generally encounter a close approximation it. Thus in *muḫammas ṭawīl* we move from 5/20 in the full cycle to 6/20 in each *far‘*, in *ṯānī ṯaqīl* we move from 3/11 in the full cycle to 4/11 in each *far‘*, while in *ḫurāsānī* we move from a quarter to a third (and it may be observed that the resulting layout of each *far‘* is identical with that of the *fawāṣil* in *niṣf wa-rub‘ al-muḫammas*, so that they could only be distinguished by the *tan/tin* timbre contrast).

Where possible, similar dispositions also appear in *ḫusrawānī* and *warašān*, which are distinctive in that they have unequal *far‘*. In the former the relationship between the two attacks of the longer *far‘* is a third, and the second has the same position as the first of the two *fawāṣil* attacks. The second *far‘* consists of only six time units, and is unusual in that the first attack is on the first time unit, although this can be explained readily enough by viewing the cycle, as the disposition in Figure 3.5 suggests, as an apocopated form of *ḫurāsānī* with the third quarter being omitted. In *warašān* it is the first *far‘* that is the shorter, consisting again of six time units, but with a more predictable disposition of attacks, while in the longer second the proportion between the two attacks is a quarter. In *turkī* the proportion is a third, but each *far‘* of this cycle includes, exceptionally, an attack on a time unit that was previously devoid of one. This feature also appears in *fāḫita*, again in both *far‘*, and there is in addition a feature that only appears in *fāḫita*, the presence of three attacks in each *far‘*. These are unusual, further, in that they completely disregard the previous internal pattern and recast the cycle in two equal halves, with the interesting consequence that while the morphology suggested by the mnemonic representation is quite unlike that indicated by al-Urmawī and Šīrāzī, the pattern determined by the attacks in the *far‘*, 2 + 4 + 4 / 2 + 4 + 4, is identical with the Systematist one,[76] thus providing for us at last one evident point of contact between their otherwise very different accounts.

As presented by Ibn Kurr, the *far‘* forms seem in general to be miniaturized versions of those marked by the *fawāṣil* attacks, filling the cycle (*fāḫita* excepted) with four instead of two attacks. But compared with the density suggested by the mnemonic representation this is still fairly minimal, and we are still lacking (*fāḫita* again excepted) any indication of an attack on the first time unit. It is difficult, accordingly, to regard the *far‘* forms as fundamentally different in function to the *fawāṣil* attacks, so that they may best be considered another form of contrastive variation providing an occasional thinning of texture. In several cases this is projected as a diminution of the *fawāṣil* attacks; indeed, the attacks within the *far‘* are themselves termed *fawāṣil*. Occasionally, however, the pattern is interestingly different, and in the case of *fāḫita* it provides a radically different structural perspective.

3.6.4.1 Quarters

The *far‘* definition is articulated in terms of quarters for those cycles that can be so divided: the *fawāṣil* attacks in the first *far‘* are situated after the first quarter and at the end of the second, and similarly in the second *far‘* after the third quarter and at end of the fourth. Descriptively this is perfectly clear, but what fails to emerge is whether the concept of the quarter is simply an arithmetical aid to expression, or whether it also represents a structural feature. We are told that three cycles, *fāḫita, ḫusrawānī* and *warašān*, cannot be divided into quarters, and in each of these the *far‘* division and/or the mnemonic representation indicates that internally they do not divide into equal halves. In the case of *niṣf wa-rub‘ muḫammas* no information is given, but given that the articulation of its halves suggests 2 + 2 + 2 rather than 3 + 3 it is to be suspected that it, too, would have been grouped with them. For the remaining cycles, however, their equal halves can be divided into equal (or, in the case of *ṯānī ṯaqīl* nearly equal) quarters, and there are cases, the most obvious being *al-sittat ‘ašarī*, where the layout of the mnemonic representation points to this being a significant division, demonstrating that the cycle was perceived as falling into quarters. Yet no reference is made to them being singled out by a pattern of attacks, or being significant in the same way that the *far‘* are. Where they come to the fore is as segments in terms of which the variant forms *šanbar* and, especially, *māšī* can be described, and it is to these that we may now turn.

3.6.5 māšī, muḥarrak, šanbar

They form part of a further and complex layer consisting of three types of variation to which some – but apparently not all – cycles could be subjected (even the most frequent, *māšī*, fails to be mentioned in relation to four, *ṯaqīl awwal, awwal ṯaqīl, warašān* and *niṣf wa-rub‘ al-muḫammas*). In contrast to the *far‘* forms, all three tend to render the texture denser than that indicated by the mnemonic representations, and in the cases of *māšī* and *muḥarrak* the consequent effect of an increase in activity and the concomitant sensation of an acceleration in tempo may lie behind the choice of term, *māšī* meaning ‘walking, going along’ and *muḥarrak* ‘set in motion’.

With *māšī*, for example, we may have an initial attack in every *rāḥ*. Such is the case in *muḫammas ṭawīl*, where the consequent reduction to a mere pulse is avoided by a timbral contrast which, however, identifies it as a repeating segment co-extensive with a quarter of the cycle, and also in *ḫurāsānī* (and, parasitic upon it, *ḫusrawānī*), where its boundaries are displaced from the expected beginning and end of the cycle, for it starts on the fifth time unit of one cycle and ends on the fourth of the next. Given the common feature of *fawāṣil* and *far‘* attack patterns that do not begin at the beginning of the cycle, this is not intrinsically surprising, but what is unusual is that it should extend beyond the end of the cycle (a feature reminiscent of the *far‘* structure of the instrumental variant of *muḫammas qaṣīr*). As might be expected, this implies that at least in this case the use of the *māšī* form was not extended over several cycles, since the logic of an overlap that fills the empty part of the next cycle is that if it were continued there would just be an undifferentiated flow of attacks.

The absence of an initial attack is also a feature of the *māšī* form of *al-sittat ‘ašarī*, where the repeated unit is a quarter of the cycle, and, parasitic upon it, *fāḫita*, where it is a third. But what is extraordinary about the latter is that what might be termed the *māšī* unit is not adjusted to fit the cycle, rather the cycle is extended by two *rāh* in order to house three full occurrences of the unit: *fāḫita*, it seems, was exceptional for its fluidity, for it may be recalled that Ibn Kurr implies that it may be thought of either as a cycle of 10 time units or as one of 20; that the *far‘* form implies a segmentation at odds with that of the mnemonic representation; and that in addition to a cycle of 20 al-Urmawī recognizes an extended form of 28. Yet although to have another of 24 might not, in the circumstances, be thought particularly unusual, such is to ignore the oddity of the dislocation that would be caused in performance by the switch to the *māšī* form, since given that its *māšī* unit was common to (or, indeed, in Ibn Kurr's analysis, borrowed from) *al-sittat ‘ašarī* it can hardly be supposed that it could signal *fāḫita* if used initially, while to introduce it later would mean altering the length of the cycle, unless it were continued as a progressive dislocation stretching over five extended cycles to return to the point of departure (i.e. 5 × 24 = 6 × 20). It would certainly not be justified to infer from this that a *māšī* unit would be repeated over such a long stretch, but the evidence of the extended *fāḫita* cycle reinforces the conclusion derived from the other descriptions that a *māšī* unit would normally not be injected just once but would be repeated, possibly extending over one or more cycles.

With *turkī, muḫammas qaṣīr* and, in all probability, *ṯānī ṯaqīl*, we revert to patterns in which there is a cycle-initial attack, and these cycles also have in common the use of attacks not only in contiguous *rāh* but also in contiguous time units. The resulting *māšī* units are not in themselves problematic, but there are problems associated with them. Thus in *turkī* the unit is /x x . /, which coincides with *tatan*, the repeated unit in the mnemonic representation, and thus raises the question whether Ibn Kurr is actually repeating the *māšī* unit as his mnemonic representation, and if not what the different feature is that the *māšī* form is injecting. With *muḫammas qaṣīr* the mnemonic representation of the *māšī* form repeats *tanatan*, which one would assume to represent / x ẋ x . /, but we are told explicitly that it corresponds to / x x x . /, thus raising the question what, if anything, is indicated by the difference between the notations *tana-* (*muḫammas qaṣīr*) and *tata-* (*turkī*), to which the answer suggested above is that it might result from no more that a disinclination to use the unusual representation *tatatan*.

A problem of a different order arises from Ibn Kurr's repeated assertion that the *māšī* forms of *ḫurāsānī* and *al-sittat ‘ašarī* are opposites. As he is considerate enough to tell us why, there should be no confusion, but in the event his explanation is rather puzzling, as it relies upon the curious fact that in *ḫurāsānī* the *māšī* form spills over from the first cycle into the second, a feature unique to *ḫurāsānī* (and its derivate *ḫusrawānī*) that would therefore serve to distinguish it from all the other *māšī* forms rather than one in particular. Possibly, then, another factor was involved, and as this cannot be because one of them has an initial attack and the other not, another distinction that is not specific to these two cycles, it might be sought in the contrast of timbre in the overspill area of the first two *rāh*, where the *tin tin* of *ḫurāsānī* contrasts with the *tin tan* of *al-sittat ‘ašarī*. This is, admittedly, hardly convincing, but it is difficult to see what other sufficiently critical factors there might have been to justify the notion of opposition.

From the above we may abstract the following inventory of *māšī* elements:

/x . /   / x x . /   / x x x . /
/*x* . *x* . x . /   /*x* . *x* . *x* . *x* . x . /
/x x . x . /
/o . *x* . *x* . x . /

If those in the first line can be said to be similarly structured, and likewise those in the second, the remaining two have nothing in common, and little to link them to the others. Patently, there is no common structural thread tying them all together; we encounter, rather, a variety of cells among which no one pattern predominates. Consequently, there appears to be no especial set of features characteristic of *māšī* cells that would distinguish this form of variation from the other two, *muḥarrak* and *šanbar*; and these in their turn offer no exceptional features, so that the criteria according to which a particular form had one of these three labels assigned to it rather than another are no longer evident.

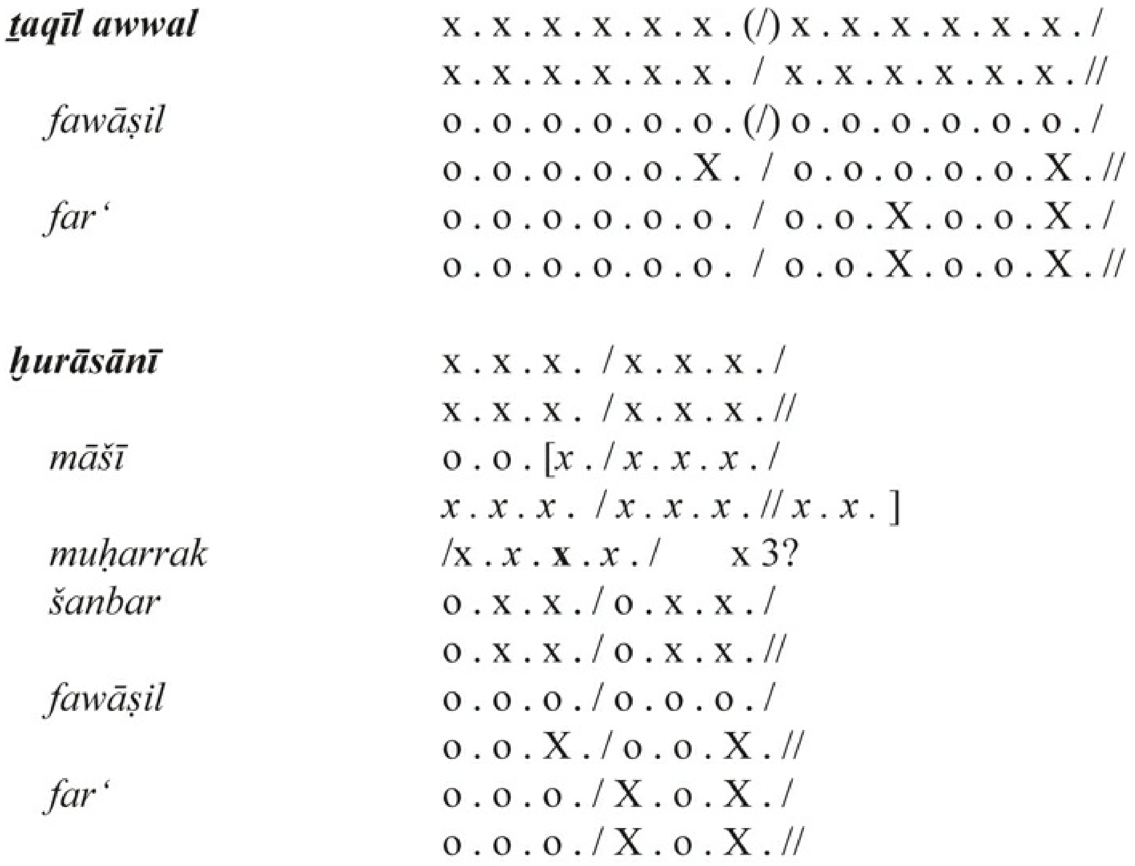
One might wish to understand the term *muḥarrak*, on general semantic grounds, as possibly implying something inherently faster than *māšī*, that is, with a denser texture of attacks, but such is not borne out by the three structures associated with it, none of which contains a further increase in the number of attacks. Nor do they appear to be related in any way that makes them cohere as a set. One is the simple alternation *tan tin*, characteristic of the *muḫammas* group (*sittat ‘ašarī, muḫammas qaṣīr* and *muḫammas ṭawīl*); another, *tan tin tā tin*, could be regarded as an extension, but could equally be compared in its incorporation of timbral contrasts over its eight time units to the *māšī* form *tin tin tin tan*; while the third, *tata tatan tatan tatan*, which is peculiar to *ṯānī ṯaqīl*, offers no point of comparison. The first form, *tan tin*, fits perfectly over all or part of the three cycles with which it is associated, while the third occupies exactly half of *ṯānī ṯaqīl*. The second form, however, *tan tin tā tin*, fails to relate in the same or a similar way to the cycles in which it is used, *ḫurāsānī, turkī* and *ḫusrawānī*: it is equivalent to a third of *ḫurāsānī* and two thirds of *turkī*, while with *ḫusrawānī* there is no simple proportion, the only logic for its presence being the fact that *ḫusrawānī* is a derivate of *ḫurāsānī*. As Ibn Kurr supplies no further information we have no means of knowing how it was used in *ḫusrawānī*, although it may be surmised that normal practice in all three cycles would be to do no more than inject it occasionally at various points in order to provide variety.

With the apparently less common *šanbar*, the derivation from Persian *čanbar* ('circle') points, if not conclusively, to it having originated as yet another addition to the already crowded semantic field of *ḍarb, dawr* and *dā’ira* . Accordingly, it might be suggested that as the phenomena involved are two cells, / o . x . x . / and / x . x . o . o . /, neither of which looks odd when compared with the *māšī* set, the use of the term *šanbar* could be linked to a rather firmer tendency than with the *māšī* and *muḥarrak* forms to repeat them throughout the cycle rather than insert them sporadically, and in support of this may be cited Ibn Kurr's remark that *ḫurāsānī* consists of four *šanbar* . As it is the first of the two cells that is used in *ḫurāsānī*, which has 24 time units, the fit is perfect. It is the only cycle in which this cell is stated to occur, while with regard to the second mention is made of just two cycles, *al-sittat ʻašarī* and *muḫammas qaṣīr* , where there is again a perfect fit between the cycle length and four occurrences of the *šanbar* cell in the former and two in the latter.

In addition to the lack of any clear distinction between the three types offered by the definitions, one may note the indication of an absence of rigorous boundaries between categories implied by the identification of the *šanbar* of *ḫurāsānī* with a *farʻ* of *turkī*. Arithmetically this is straightforward, both consisting of six time units, and the equation is supported by the positioning of the attacks indicated, for the *farʻ* of *turkī* corresponding to the *šanbar* cell /o . x . x . / is /o o x o X . /.

3.7 Conspectus

Rather than a strictly calibrated hierarchy ranging from a full cycle with a clearly profiled morphology to differently accented subdivisions to various secondary patterns, what seems to be revealed by the full range of phenomena referred to by Ibn Kurr is a rather more loosely organized situation in which boundaries are temporarily smudged or effaced by various possibilities of displacement, substitution and interchange. In part, at least, this is because, for all the copiousness of the information, not everything is spelled out, and the impression of boundaries on occasion so permeable as to be virtually non-existent is to a certain extent attributable to the lack of any discussion of hierarchies and the modalities of transition between them. That there was a hierarchy is clearly implied by both the terminology and the organization of the material, but unfortunately the first stage, the presentation of the characteristic articulation of the full cycle by means of mnemonic patterns, is unclear in that it frequently does no more than present repeated patterns that make up the full complement of time units without indicating more than a pulse or identifying small-scale recurrences, and thus fails to reveal the cyclical identity of the whole. Nevertheless, it is reasonable to assume that the shape to which the mnemonic representations relate was fundamental, and for this reason was introduced first, with everything else a selection or deviation from it introduced to give variety. Accordingly, it is also placed first in Figure 3.6 , which provides a summary of the above findings. However, rather than continue with the *fawāṣil* attacks and *farʻ* divisions, as Ibn Kurr does, the other variant forms, *māšī, muḥarrak* and *šanbar* , are placed next to the mnemonic representations, on the grounds of the greater comparability with them afforded by the incidence of attacks that they specify. As before, *tan* is represented by / x . /, *tin* by / *x* . /, *tā* by / **x** . /, *tanan* by / x Ẋ . / and *tatan* by / x x . /, but / o . / and / o o . / are substituted in the *fawāṣil* and *farʻ* definitions.



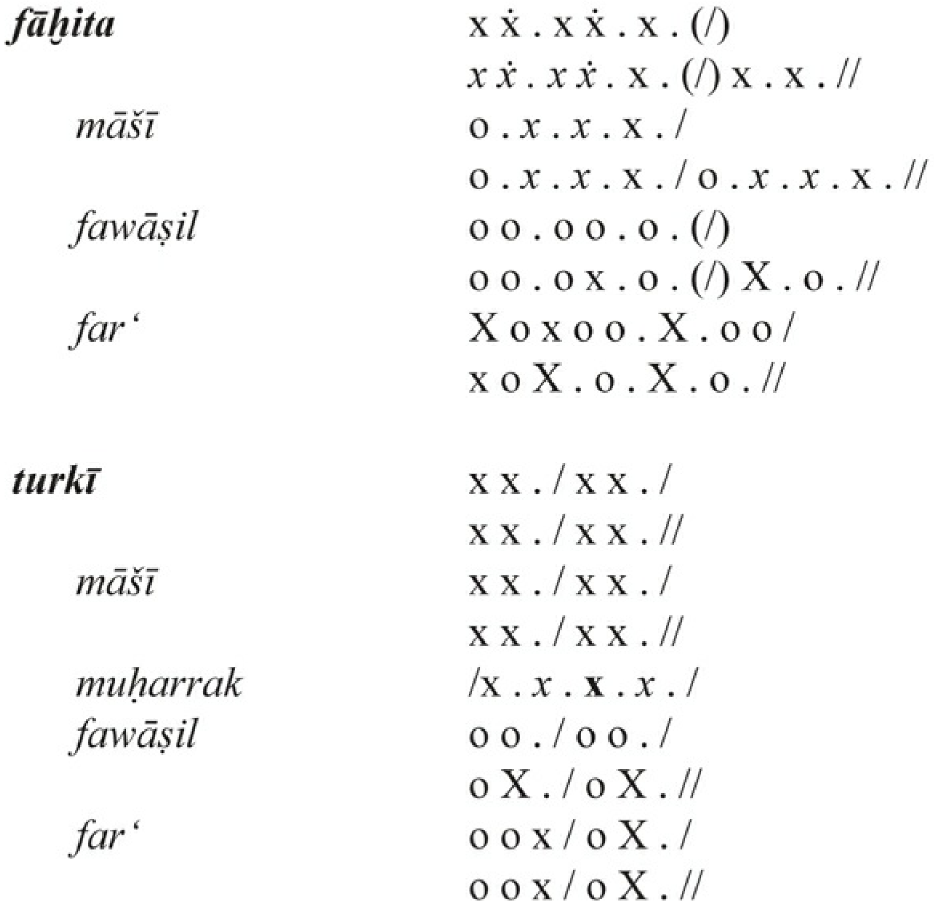
ṯaqīl awwal	x . x . x . x . x . x . (/) x . x . x . x . x . x . /
	x . x . x . x . x . x . / x . x . x . x . x . x . //
fawāṣil	o . o . o . o . o . o . (/) o . o . o . o . o . o . /
	o . o . o . o . o . X . / o . o . o . o . o . X . //
farʻ	o . o . o . o . o . o . / o . o . X . o . o . X . /
	o . o . o . o . o . o . / o . o . X . o . o . X . //
ḫurāsānī	x . x . x . / x . x . x . /
	x . x . x . / x . x . x . //
māšī	o . o . [*x* . / *x* . *x* . *x* . /
	x . *x* . *x* . / *x* . *x* . *x* . // *x* . *x* .]
muḥarrak	/x . *x* . **x** . *x* . / x 3?
šanbar	o . x . x . / o . x . x . /
	o . x . x . / o . x . x . //
fawāṣil	o . o . o . / o . o . o . /
	o . o . X . / o . o . X . //
farʻ	o . o . o . / X . o . X . /
	o . o . o . / X . o . X . //

ḫusrawānī	x . x . x . (/) x . x . x . (/)
	x . x . x . //
fawāṣil	o . o . o . (/) o . o . X . (/)
	o . o . X . //
māšī	o . o . [*x . / x . x . x . /*
	x . x . x . // x . x .]
muḥarrak	/x . *x* . **x** . *x* . /
far‘	o . o . o . (/) X . o . X. (/)
	X . o . X. //
warašān	x . x . x . /
	x . x . x . x . //
fawāṣil	o . o . o . /
	o . X . o . X . //
far‘	o . X . X . /
	o . o . X . X . //
muḥammas ṭawīl	x . x . x . / x . x . / x . x . x . / x . x . /
	x . x . x . (/) x . x . / x . x . x . (/) x . x . //
māšī	*x . x . x . x .* x . / *x . x . x . x .* x . /
	x . x . x . x . x . / *x . x . x . x .* x . //
muḥarrak	/x . *x* . / ...
fawāṣil	o . o . o . / o . o . / o . o . o . / o . o . /
	o . o . o . (/) o . X . / o . o . o . (/) o . X . //
far‘	o . o . o . o . o . / o . X . o . o . X . /
	o . o . o . o . o . / o . X . o . o . X . //

sittat ‘ašarī	x . x . x . x . / x . x . x . x . /
	x . x . x . x . / x . x . x . x . //
māšī	o . *x* . *x* . x . / o . *x* . *x* . x . /
	o . *x* . *x* . x . / o . *x* . *x* . x . //
muḥarrak	/x . *x* . / …
šanbar	x . x . o . o . / x . x . o . o . /
	x . x . o . o . / x . x . o . o . //
fawāṣil	o . o . o . o . / o . o . o . o . /
	o . o . o . X . / o . o . o . X . //
far‘	o . o . o . o . / o . X . o . X . /
	o . o . o . o . / o . X . o . X . //

muḫammas qaṣīr	x . x . / x . x . /
	x . x . / x . x . //
māšī	x x x . / x x x . /
	x x x . / x x x . //
muḥarrak	/x . *x* . / …
šanbar	x . x . o . o . /
	x . x . o . o . //
fawāṣil	o . o . / o . o . /
	o . X . / o . X . //
far‘	o . o . / X . X . /
	o . o . / X . X . //

fī al-āla		x ẋ . x ẋ . x . /
		x ẋ . x ẋ . x . //
quarters	1.	x . o . / x . o . /
		x . o . / x . o . //
	2.	o . x . / o . x . /
		o . x . / o . x . //
	or:	o . / x . o . / x . o . /
		x . o . / x . //[o .]
far‘		x . o . [x . o . /
		x . o .] [x . o . //
		x . o .] ..
niṣf wa-rub‘ muḫammas		*x . x .* (/)*x . x .* (/)
		x . x . //
fawāṣil		o . o . (/) o . X . (/)
		o . X . //
awwal ṯaqīl		x ẋ . x . x . x . x . / x ẋ . x . x . x . x . /
		x ẋ . x . x . x . x . / x ẋ . x . x . x . x . //
fawāṣil		o o . o . o . o . o . / o o . o . o . o . o . /
		o o . o . o . o . X . / o o . o . o . o . X . //
ṯānī ṯaqīl		x ẋ . X . / x . x . x . /
		x ẋ . X . / x . x . x . //
māšī		x x . x . / *x* . *x* . x . /
		x x . x . / *x* . *x* . x . //
muḥarrak		/x . *x* . **x** . *x* . /
	also:	/x x x x . / x x . x x . /
fawāṣil		o o . o . / o . o . o . /
		o o . X . / o . o . X . //
far‘		o o . o . / X . o . X . /
		o o . o . / X . o . X . //



fāḫita	x ẋ . x ẋ . x . (/)
	x *ẋ* . *x* *ẋ* . x . (/) x . x . //
māšī	o . *x* . *x* . x . /
	o . *x* . *x* . x . / o . *x* . *x* . x . //
fawāṣil	o o . o o . o . (/)
	o o . o x . o . (/) X . o . //
far‘	X o x o o . X . o o /
	x o X . o . X . o . //
turkī	x x . / x x . /
	x x . / x x . //
māšī	x x . / x x . /
	x x . / x x . //
muḥarrak	/x . *x* . **x** . *x* . /
fawāṣil	o o . / o o . /
	o X . / o X . //
far‘	o o x / o X . /
	o o x / o X . //

Figure 3.6 Full inventory including variants

What these juxtapositions reveal with greater clarity than hitherto is the considerable variety of types of alteration. In the more common *māšī* form these range from an apparent absence of change in *turkī* – even if we are entitled to think that the appearance may be deceptive – to a radical reconstitution of the structure of the cycle, including extending it, in *fāḫita* . In between, we find in *muḫammas ṭawīl* an identical pulse to that of the mnemonic formulation, but with qualitative differentiation, and in *ṯānī ṯaqīl* a similar differentiation with, in addition, the probable substitution of an obligatory attack for an optional one. The *māšī* forms of *muḫammas qaṣīr* are of a similar order, involving straightforward processes of addition and deletion. Since substitutions such as these were presumably quite commonplace, [77] what is interesting is that in their concern to codify them musicians placed them taxonomically on a par with other and more radical forms of alteration, such as the curious overspill across cycle boundaries in *ḫurāsānī* and its derivate *ḫusrawānī*, and the extra time units added in the more extreme case of *fāḫita* . The result is that the term *māšī* covers a rather heterogeneous group, arrived at, it seems, pragmatically, even arbitrarily, rather than through inductive logic.

In contrast, heterogeneity could hardly be claimed as a feature of *muḫarrak* , for it largely consists of the application of one of two similar and related formulae (/x . *x* . / and /x . *x* . **x** . *x* . /), each a regular succession of simple qualitative alternations. There is, though, an exception, the alternative pattern offered (alongside /x . *x* . **x** . *x* . /) for *ṯānī ṯaqīl* , and despite the fact that this is intuitively more appropriate in that it actually fits the odd-number time unit total of the cycle, it is so different from the other that it is difficult to see what could have prompted the use of the same term for it. Similarly, to all appearances, with *šanbar* , where the formulae in question (/o . x . x . / and /x . x . o . o . /) have contrary distributions, although it is possible to neutralize the opposition by pointing to the common characteristic of two successive attacks flanked by an absence.

Given the variety of phenomena each term subsumes, the lines of demarcation between them are not always easy to discern. Certain oppositions are clear, but in some contexts the degree of specification implicit in such terminological precision seems excessive: in *muḫammas qaṣīr* , for example, we find the repeated basic cell / x . x . / added to in *māšī* (/ x x x . /), qualitatively varied in *muḫarrak* (/x . *x* . /), and alternately omitted in *šanbar* (/x . x . / o . o . /), but it is treated similarly in *far‘* (/o . o . / X . X . /), while other forms of omission (/x . o . / and /o . x . /) are encountered in the instrumental version. It has been suggested that a characteristic of *šanbar* not shared by *muḫarrak* and *māšī* might have been that it was habitually sustained throughout a cycle, but it must be conceded that Ibn Kurr gives no positive indication of how often, or for how long, in a given composition, the performer would normally move away from the basic form, still less whether it was standard to introduce several, or even all, of the possible substitutions rather than just one or two. One simple principle that might have operated is the need not to depart from the pattern first established for so long that its identity is compromised, if not lost completely. If so, it would suggest restraint in the use of many of the possible substitutions. Isolating the two distinctive attacks, in particular, is a radical reduction that requires, especially in the longer cycles, considerable concentration if the identity of the cycle is not to be lost, and the *far‘* forms are little better in this respect, especially as they sometimes introduce patterns of attacks counter to those we may assume to characterize the fundamental form.

3.7.1 al-‘Umarī

In relation specifically to Ibn Kurr's account, there is one further source of information to be mentioned. Reference has already been made to comments by al-ʿUmarī, and as the one writer to provide a partial inventory of the contemporary repertoire of Mamluk Cairo and give some technical information about the songs listed, it is instructive to see how much of the vocabulary marshalled by Ibn Kurr is repeated by him in the *masālik al-abṣār*, and perhaps also to gain some insight into which rhythmic cycles were in common use and which not. It has to be said, however, that al-ʿUmarī's sample is not particularly large, for it is only in a brief section of seven pages (in a volume of over 400) that we find references to the rhythmic vocabulary used by Ibn Kurr.[78] Within this section, one designation is mentioned much more frequently than any other:

ḫurāsānī	15
fāḫita	2
ṯaqīl	2
turkī	2
muḫammas	1

Particularly surprising here, given the size of the *muḫammas* family, is that it is represented by just one of the 22 named instances recorded. However, it would be rash to extrapolate from this profile, since although more than one composer is represented, all the songs listed are from the repertoire of one musician, and it could therefore be skewed by a personal predilection for *ḫurāsānī*. Despite this, it is noteworthy that although there are far fewer entries than in Ibn Kurr's catalogue, the list still includes one designation he does not mention, the bald *ṯaqīl*, the implication possibly being that not all practising musicians maintained the same terminological discriminations as Ibn Kurr, using just one term for at least two of *ṯaqīl awwal, awwal ṯaqīl* and *ṯānī ṯaqīl*. On the other hand, it is also deceptive in that it omits to show that all the other terms except one are mentioned with an accompanying qualification that is absent from Ibn Kurr's repertoire of technical terms. The *ḫurāsānī* entries, for example, are combined with the traditional distinction between *ṯaqīl* (given for 14 of them) and *ḫafīf* (for the remaining one) that Ibn Kurr fails to register, and they possibly provide thereby an alternative designation for the distinction between *ḫurāsānī* and *ḫusrawānī*. The *muḫammas* entry, likewise, is actually *muḫammas ḫafīf* (presumably, but not necessarily, corresponding to *muḫammas qaṣīr*), while *turkī* is followed by a qualifier not encountered elsewhere, possibly to be read as *raḫīm* ('soft'), and if so conceivably to distinguish it from the *ḥarbī* ('military') form.

Given the absence from the repertoire cited by al-ʿUmarī of such basics as several of Ibn Kurr's cycle names, it was perhaps only to be expected that there would be no mention of *farʿ* forms or of the *māšī, muḥarrak* or *šanbar* variants, but other technical terms do appear, some of which fail to be mentioned by Ibn Kurr, while others are used in slightly different ways. Thus *dāʾira* designates not a single cycle but the whole span of a composition, for we are told of how many cycles (*dawr*) it consists, as in the very first case, which also introduces further specifications. This particular composition, then, is stated to be a song in the rhythmic cycle (*ḍarb*) *ṯaqīl al-ḫurāsānī*, the span (*dāʾira*) of which consists of 18 cycles (*dawr*), each one with 11 attacks (*daqqa*) and a quarter and an eighth attack, some heavy (*ṯiqāl*), some light (*ḫifāf*). As a total, 11 is close to the 12 *tan* corresponding to the 12 *rāh* of Ibn Kurr's initial definition, and it is particularly interesting to see al-ʿUmarī injecting the vital light/heavy contrast into what appears otherwise to be an undifferentiated stream of attacks. The fractions, however, are wholly unexpected, and assuming that they relate to duration could mean not merely the division of a *rāh* into its two constituent time units, but the division of a time unit into a half or even a quarter. But even if it is impossible to know exactly what is meant by these fractions, the implication of the precise specification is that one would expect this particular shape to be maintained in at least the majority of cycles, thus implying that what for Ibn Kurr would be a particular variant form might not just be introduced on occasion to provide contrast, but could itself serve as the principal structure.

The next song is again in *ṯaqīl al-ḫurāsānī*, but this time with a more straightforward 12 attacks, and since it must be presumed that the distinction between the two forms relates to what is understood to be the composed form prior to any liberties that performers might take with it, we are left with the paradox that such contrasts appear to demonstrate that small differences could be considered distinctive and hence would be retained, while the freedom to which Ibn Kurr's variations point implies that they could readily be effaced. The next two songs revert to the 11 and a quarter and an eighth structure, which in the second is further qualified by an opaque phrase which will recur with a number of other songs, *bi-'l-šarḥ*, at the meaning of which one can only guess.[79] The more common 12 attacks is the only specification to be mentioned in relation to the other cycles, *ḫafīf al-ḫurāsānī*, *ḫafīf al-muḫammas* and *turkī raḫīm*, and here too sometimes with the qualification *bi-'l-šarḥ*. Accepting, with Ibn Kurr, that *turkī* has 12 time units, there would again need to be a heavy/light differentiation to create the cycle, but the notion that each time unit might be marked by an attack is hardly far-fetched (for example, supplementing the eight Ibn Kurr mentions for the *māšī* form with four lighter ones). Similarly with *ḫafīf al-muḫammas*, if by that designation is meant the variant Ibn Kurr terms *niṣf wa-rubʿ al-muḫammas*, while if the equivalent is rather the cycle of 16 time units, *muḫammas qaṣīr*, one may again appeal to Ibn Kurr's *māšī* form for one suggestion as to what the pattern of attacks might be. In any event, further preference for cycles of 12 time units is evinced in one composition which used four different cycles, but all of this length. We are not, unfortunately, told which ones they are, but it should be observed that Ibn Kurr only lists two such cycles, so that even if a *farʿ* of *ṯaqīl ṯānī* were co-opted, at least one would lie outside the repertoire he describes, possibly, therefore, a cycle such as *ramal* or *hazaj*, mentioned by al-Urmawī, or even Šīrāzī's *ḍarb-i rāst*.

In another case where four (again unnamed) different cycles are used the lengths are different, and what is significant here is the reflection of Ibn Kurr's emphasis on hierarchy, for we are informed that they are 'the four *aṣl* rhythmic cycles'. But if this confirms the currency of the concept of a basic set, the restriction of its membership to just four suggests a parallel with the equivalent group of modes isolated in other non-Systematist texts such as al-Irbilī's *urjūza*, possibly as a reflection of their greater concern for cosmological linkages. There is one non-Systematist text virtually contemporary with the *ġāyat al-maṭlūb* that includes an account of the rhythmic cycles, Kāšānī's *kanz al-tuḥaf*, but unfortunately it is quite unhelpful: deriving from al-Kindī's account, it signally fails to report mid fourteenth-century practice and is only of antiquarian interest.

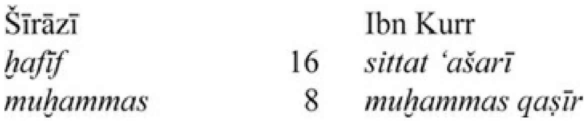
Also derived from or, more precisely, used by al-Kindī is one further term not mentioned by Ibn Kurr that occurs in al-ʻUmarī's material, *mufrad* ('isolated'). For al-Kindī it designated an attack that was separated from others by a silent time unit, and although what it means for al-ʻUmarī is not wholly clear, it is likely that it has the same general sense.[80] However, because the lack of both definitions and parallel passages elsewhere renders the interpretation of al-ʻUmarī's terminology hazardous, the importance of his evidence is to be found less in the provision of clarificatory factual detail than in the very fact of a near but not exact match with Ibn Kurr's account, which suggests that despite the multi-layered richness of the latter it still fell a little short of being a comprehensive examination of the complex rhythmic possibilities that fourteenth-century Cairo musicians could both call upon and variously conceptualize.

3.7.2 Juxtapositions

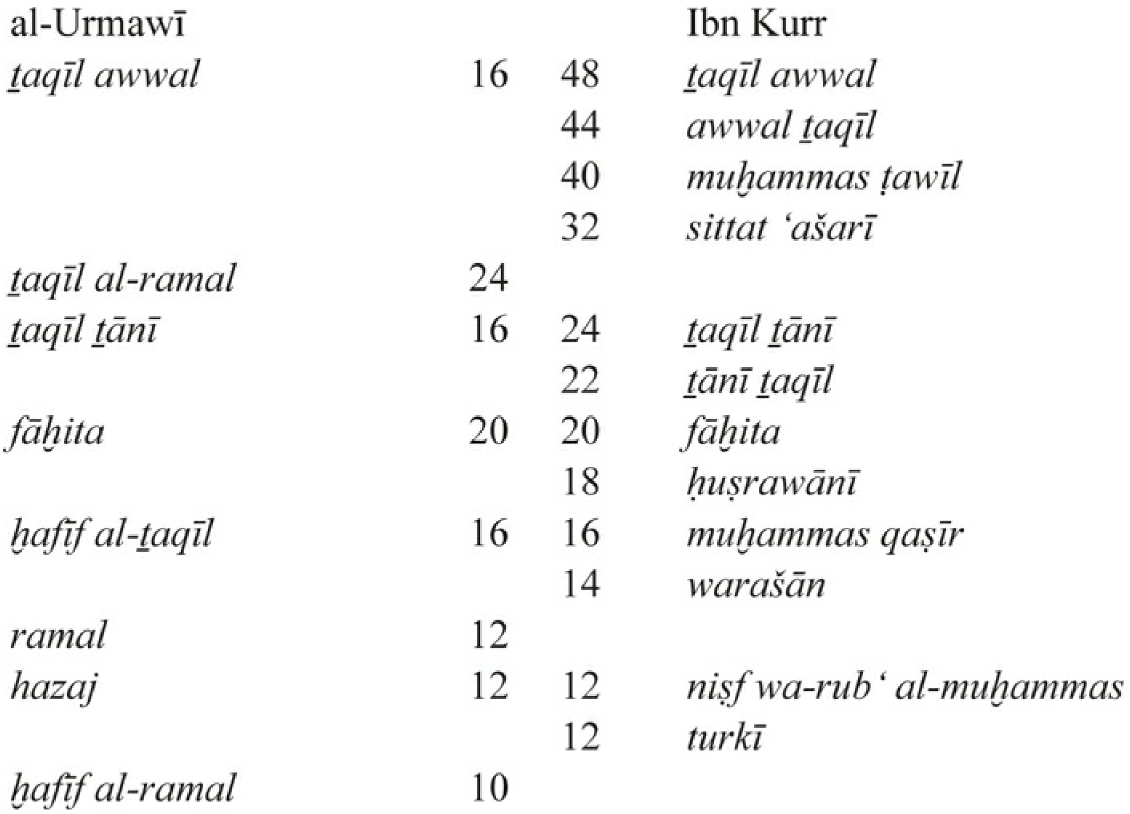
Even if incomplete in certain respects, Ibn Kurr's account is nevertheless considerably richer in detail than those of the Systematist theorists, and for that reason has been discussed, despite occasional cross-referencing, essentially as an independent entity. But at the same time it serves as an obvious term of comparison, and we may reconsider first, at the analytical levels that are common to both, the degree to which it agrees with, or diverges from, the early Systematist accounts presented by al-Urmawī and Šīrāzī. To begin at the level of terminology, we note from a Systematist perspective some striking omissions in Ibn Kurr's account: conspicuously absent from it is the time-honoured distinction between *ṯaqīl* and *ḫafīf* – the latter term is omitted, and with it the cycle names *ḫafīf al-ṯaqīl* and *ḫafīf al-ramal*, as well as the *ḫafīf* that Šīrāzī had introduced. For Ibn Kurr it survives, as we shall see, only as a label for a formal category. There are also, in contrast, some unanticipated additions, for he gives as separate items *ṯaqīl awwal* and *awwal ṯaqīl, ṯaqīl ṯānī* and *ṯānī ṯaqīl; muḫammas* spawns a group of four cycles; and *warašān* is now no longer a mere alternative name but an independent entity.

The existence of such differences might, though, be thought less than surprising. Provided that there was a sufficient degree of commonality, expressed in the preponderant use of a core of common structures serving as the vehicles for the creation and dissemination of what might justifiably be termed an international repertoire, the addition of a number of local variants or additional elements would hardly disturb the general picture, indeed, they might even be expected as regional style markers. If we consider just the cycle names, however, the level of agreement is disconcertingly poor. Common to both al-Urmawī and Ibn Kurr are only *ṯaqīl awwal, ṯaqīl ṯānī, muḫammas, fāḫita* and *warašān*, the last of which, for al-Urmawī, is a variant designation of *ṯaqīl awwal*, while he mentions *muḫammas* merely as a variant designation of *ḫafīf al-ṯaqīl*: the whole family of *muḫammas* cycles recorded by Ibn Kurr only finds a comparable Systematist account nearly a century later in the works of Marāġī.[81] Of the remaining cycle names in the *ġāyat al-maṭlūb*, only *turkī* is recorded by Šīrāzī, with the result that the early Systematists note the existence of five cycle names unknown to Ibn Kurr, *ḫafīf, ḫafīf al-ṯaqīl, ṯaqīl al-ramal, ḫafīf al-ramal* and *hazaj*, while, conversely, only he lists *muḫammas ṭawīl, al-sittat ʻašarī, muḫammas qaṣīr, niṣf wa-rubʻ al-muḫammas, awwal ṯaqīl, ṯānī ṯaqīl, ḫuṣrawānī* and, as an independent cycle, *warašān*. Such a distribution does not readily fit with the notion of a common core possibly supplemented by other rhythms that had only local currency, and any correspondence there might be between the accounts of al-Urmawī and Ibn Kurr appears to weaken even further when we take account of the constituent number of time units they assign to each cycle. These are listed in Figure 3.7 in order of magnitude according to Ibn Kurr, showing that the four longest cycles are peculiar to him.

This raises the question whether we are dealing here with yet another example of presentational inflation, such that the comparable unit of measurement between the two should not be the time unit, but rather that al-Urmawī's time unit, *naqra*, should correspond to Ibn Kurr's *rāḥ*, thereby halving the numbers in the right hand column. Given that Šīrāzī regards *muḫammas* as half of *ḫafīf*, it is enticing to think that we might have:



Šīrāzī		Ibn Kurr
ḫafīf	16	*sittat ʻašarī*
muḫammas	8	*muḫammas qaṣīr*



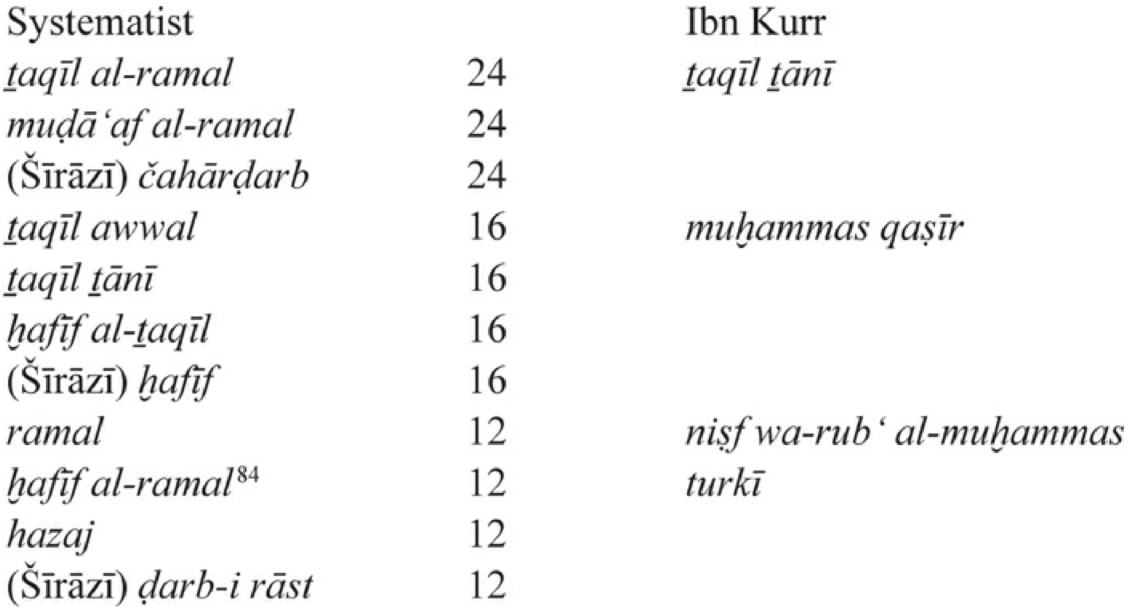
al-Urmawī			Ibn Kurr
ṯaqīl awwal	16	48	*ṯaqīl awwal*
		44	*awwal ṯaqīl*
		40	*muḫammas ṭawīl*
		32	*sittat ʻašarī*
ṯaqīl al-ramal	24		
ṯaqīl ṯānī	16	24	*ṯaqīl ṯānī*
		22	*ṯānī ṯaqīl*
fāḫita	20	20	*fāḫita*
		18	*ḫusrawānī*
ḫafīf al-ṯaqīl	16	16	*muḫammas qaṣīr*
		14	*warašān*
ramal	12		
hazaj	12	12	*niṣf wa-rubʻ al-muḫammas*
		12	*turkī*
ḫafīf al-ramal	10		

Figure 3.7 al-Urmawī and Ibn Kurr: comparison of time unit totals

But if the figures are adjusted in this way we would have an equivalent and even greater imbalance at the bottom of the table, with the five shortest cycles now being peculiar to Ibn Kurr; and a further reason for rejecting this conjecture is not only that it would fail to bring the rival versions of *ṯaqīl awwal* and *ṯaqīl ṯānī* appreciably closer to each other, but also that the one cycle that is identical in all three accounts, *fāḫita*, would cease to be so.

A different kind of problem is raised by *turkī*, a cycle name unknown to, or at least not mentioned by, al-Urmawī, but recognized by both Šīrāzī and Ibn Kurr, and which therefore suggests the possibility of a relatively recent innovation that had been accepted over a wide geographical area. But the structures their definitions point to are not the same: for Ibn Kurr it has a regular 3 + 3 + 3 + 3 pattern, while Šīrāzī gives one definition of 20 time units and another of 12 and two thirds which, following Neubauer's interpretation,[82] would be the earliest recorded example of an *aksak* rhythm that is not a neat combination of duple and triple elements but is basically duple with one time unit fractionally extended. Accordingly, one would be tempted to regard this version as derived from a Turkish folk dance, whereas the Egyptian cycle is likely to be of very different derivation, its name most probably being associated with the Turkish element in the Mamluk army.[83]

If the names fail to match at all well, it may be suggested that a potentially more productive approach would be to examine the internal disposition of those cycles with the same time unit totals, to see whether different names might not be local preferences concealing identical structures. In pursuing this line of enquiry, reference should also be made to three further cycles recorded by Šīrāzī, so that in all we are concerned with those shown in Figure 3.8.[84]



Systematist		Ibn Kurr
ṯaqīl al-ramal	24	*ṯaqīl ṯānī*
muḍāʻaf al-ramal	24	
(Šīrāzī) *čahārḍarb*	24	
ṯaqīl awwal	16	*muḫammas qaṣīr*
ṯaqīl ṯānī	16	
ḫafīf al-ṯaqīl	16	
(Šīrāzī) *ḫafīf*	16	
ramal	12	*niṣf wa-rubʻ al-muḫammas*
ḫafīf al-ramal[84]	12	*turkī*
hazaj	12	
(Šīrāzī) *ḍarb-i rāst*	12	

Figure 3.8 Systematists and Ibn Kurr: cycles with the same time unit totals

Here, as soon as we proceed beyond the simple time unit totals, account needs to be taken of the interpretative problems resulting from differing methods of presentation that are not always directly comparable, and in any case sometimes allow more than one structure to emerge. Nevertheless, certain comparisons can be made readily enough. Considering first Ibn Kurr's *ṯaqīl ṯānī/ḫurāsānī*, we find that his mnemonic presentation points to a 6 + 6 + 6 + 6 shape that cannot be mapped onto the internal patterns recognized by al-Urmawī for either *ṯaqīl al-ramal* or *muḍā‘af al-ramal*, or that suggested by Šīrāzī for *čahārḍarb*. This leaves as the only feasible connection one between Ibn Kurr's cycle and al-Urmawī's *ṯaqīl al-ramal* in the version given in the *risāla al-šarafiyya*, which proceeds by repeating 4 + 2, and in support one could cite the *far‘* pattern of the former, in which the attacks for the second and fourth quarters have the same 4 + 2 distribution:

o . o . o . / X . o . X . /
o . o . o . / X . o . X . //

While by no means a convincing case for equivalence – and it must not be forgotten that the definition given for *ṯaqīl al-ramal* in the *kitāb al-adwār* indicates a different internal pattern – these similarities should not be dismissed out of hand. They are not, however, helped by the general issue of the glaring mismatch between the definitions given for what al-Urmawī calls the *ḍarb al-aṣl* and Ibn Kurr the *fawāṣil*, the two distinctive attacks that can serve to identify a cycle, for whereas they both give a division into 3/4 + 1/4, they do it at different points: al-Urmawī's second attack coincides with Ibn Kurr's first (in Ibn Kurr's version the 3/4 segment is split across two cycles). If the time units in question are indicated by X, the two versions may be represented as follows:

al-Urmawī X . o . x . / x . o . x . / x . o . x . / X . o . x . // X
Ibn Kurr o . o . o . / o . o . o . / o . o . X . / o . o . X . //

As there is in any case nothing special about the 3/4 + 1/4 division, which is standard elsewhere, it is reasonable to conclude that a connection between these two cycles mooted on the basis of the above evidence could only be described as tenuous.

If we then turn to Ibn Kurr's *muḫammas qaṣīr* of 16 time units, there are four possible counterparts to consider. Given the straightforward 4 + 4 + 4 + 4 structure suggested for it by the mnemonic representation it is evidently not to be equated with either al-Urmawī's *ṯaqīl awwal* or his *ṯaqīl ṯānī*, both of which begin with 3 + 3. But even with the remaining two, there seems to be little in common beyond the use of multiples of four time units: the internal arrangement in *ḫafīf* is 2 + 2 + 4 + 2 + 2 + 4, while *ḫafīf al-ṯaqīl* is based upon a repetition of 2 + 1 + 1. These groupings are echoed neither in the *far‘* forms of *muḫammas qaṣīr* nor in its *māšī, muḥarrak* and *šanbar* variants, and when we look at the positioning of the two distinctive attacks we find that they both again produce a 3/4 + 1/4 division, but, as before, are positioned differently:

al-Urmawī X . o . x . / x . o . x . / x . o . x . / X . o . x . // X
Ibn Kurr o . o . o . / o . o . o . / o . o . X . / o . o . X . //

There remain the various cycles with 12 time units, four recorded by al-Urmawī and Šīrāzī, and two by Ibn Kurr. Of the latter, *niṣf wa-rub‘ al-muḫammas* bears all the signs of being a somewhat marginal secondary derivation, and thus hardly a strong candidate for membership of a shared core repertoire; and insofar as its structure can be discerned it seems to be 6 + 6, which could only be matched, if at all, by one of the three possibilities listed by al-Urmawī for *ramal*, 2 + 4 + 2 + 4, and even here the patterns of attacks are not congruent. As for *turkī*, its pattern of attacks, structured as 3 + 3 + 3 + 3, finds a parallel only in a variant of *hazaj* listed by Šīrāzī which is, however, half the cycle, consisting of 3 + 3.

Whatever the degree of opacity that might be caused by differences of analytical approach, it is thus apparent that we are dealing with descriptions of two quite distinct sets. Even where there are cycles with the same number of time units, what we can glean of their normative inner disposition points to contrast rather than congruity, and matters are no better when we consider those for which the same name is used. With *turkī*, indeed, the contrast becomes particularly blatant: nothing in Ibn Kurr's account resembles in the least the *aksak* structure of Šīrāzī's *turkī*, and even with what appears to be the one common item, *fāḫita*, for which Ibn Kurr and the Systematists disagree on the dimensions of the augmented forms but do at least agree on a basic form with 20 time units, the internal articulations they describe are quite different. Accepting that the name *turkī* could well have been arrived at independently in different places to designate two distinct cycles with quite different origins, we are left with *fāḫita* as the only name that is reliable as evidence for a geographical link, and even here the two inner dispositions of this cycle of 20 time units cannot be reconciled. One might wish to appeal to the name *ḫurāsānī*, the preferred alternative to *ṯaqīl awwal*, as a further sign of an eastern connection, but this can be countered by the name given to the cycle derived, or at least perceived to be derived, from it, *ḫusrawānī*, which perversely points if anything in the other direction, towards North Africa, as it is mentioned by al-Tīfāšī in his account of Andalusi practice.[85] The conclusion is inescapable: there are numerous elements indicative of distance from the Systematist account, while those pointing to proximity are vanishingly few; and the situation is rendered all the more confusing by the fact that what is here labelled the Systematist account is by no means a coherent and unified body of definitions: as Figure 3.1 shows, al-Urmawī is capable of describing certain cycles in the *risāla al-šarafiyya* in a manner quite different to that previously given in the *kitāb al-adwār*. This may reflect historical developments coupled with, or caused by, shifts in taste relating to the change from an Arab/Abbasid to a Mongol/Ilkhanid environment, but whatever the reason such differences point to rhythmic practice being an area of instability and malleability, as basic cells are variously combined into extended structures that can then be varied and even fragmented. Nevertheless, even if the surface phenomena do not compare, it is clear that both the basic ingredients with which Ibn Kurr was familiar and the processes to which they were subjected are analogous: Mamluk musicians and their Ilkhanid confrères, it seems, created typologically similar rhythmic structures and employed similar creative strategies, but operated independently.

[1] In Neubauer 2008–9.

[2] Quite apart from the absence of a separate study devoted to it, there is no mention of it, for example, in the survey article by Yammine (1999).

[3] See Wright 1983.

[4] See Wright 2010: pp. 53–71.

[5] See Neubauer 1998, Sawa 1983–4, 1989, 2009.

[6] *kitāb al-šifā’, al-riyāḍiyyāt*, 3: *jawāmi‘ ‘ilm al-mūsīqī*, ed. Z. Yūsuf (Cairo, 1956), pp. 79–142, ed. A.H. Turabi (Istanbul, 2004), pp. 62–103, tr. in D’Erlanger 1935: pp. 167–228.

[7] Abū Manṣūr b. Zayla, *al-kāfī fī al-mūsīqī*, ed. Z. Yūsuf (Cairo, 1964), if, interestingly, from a different source to the one that survives in al-Kindī’s *risāla fī ajzā’ ḫabariyya fī al-mūsīqī*, in *mu’allafāt al-kindī al-mūsīqiyya*, ed. Z. Yūsuf (Baghdad, 1962), pp. 97–8.

[8] India Office Library, Ethé 2763, fol. 15v. It, too, reverts to al-Kindī’s terms of description, despite citing al-Urmawī at the head of its account of the seven main rhythmic cycles.

[9] See Farmer 1943, Neubauer 1998, Sawa 2009.

[10] The term for a cycle in general is *dawr*, while the characteristic cycles used in practice are termed *īqā‘āt* by al-Kindī and al-Fārābī, but *alḥān* (also *qawānīn*) by the Iḫwān al-Ṣafā’.

[11] This is confirmed by al-Fārābī (see Neubauer 1994b: p. 148).

[12] Ibid.: p. 162 and p. 169. According to al-Fārābī, this was the view of Isḥāq al-Mawṣilī.

[13] *ḥāwī al-funūn wa salwat al-maḥzūn*, facsimile in Publications of the Institute for the History of Arabic-Islamic Science, series C, 52 (Frankfurt, 1990), pp. 180–1. See also Wright 1999.

[14] He also mentions two sets of four variants implying melodic features, but arithmetic apart these are not relevant to the present discussion.

[15] One may note, incidentally, that the call of the ringdove had been invoked by the Iḫwān al-Ṣafā’ to provide an alternative bird-song mnemonic for a rhythmic cycle (Wright 2010: p. 152).

[16] As, e.g., by al-Lāḏiqī (D’Erlanger 1939: pp. 487–8 and 493). Mention might even be made of a cycle of 200 time units, an invention of Marāġī (*jāmi‘ al-alḥān*, p. 227 and p. 229), but this was doubtless a special case, doomed to be quickly abandoned.

[17] Z. Yūsuf (ed.), *mu’allafāt al-kindī al-mūsīqiyya*, p. 97. See also Farmer 1943.

[18] See Sawa 1989: p. 58, 2009: p. 228.

[19] *kitāb al-adwār*, p. 150.

[20] A similar perspective is suggested by Marāġī’s initial reference (*jāmi‘ al-alḥān*, p. 23) to there being seven cycles ‘apart from doublings (*taḍ‘īfāt*) and halvings (*tanṣīfāt*)’.

[21] p. 253. This and all further references are to the Arslan edition.

[22] This perception is still alive in the summary account by Ibn al-Ṭaḥḥān, who uses al-Fārābī’s terminology, *majāz* and *i‘timād*, with regard to the transitional area between the two cycles (*ḥāwī al-funūn*, p. 181).

[23] pp. 252–3.

[24] *kitāb al-adwār*, p. 153, which only gives the 20 time unit form; the additional longer form is mentioned in the *risāla al-šarafiyya*, p. 255.

[25] The *risāla al-šarafiyya* gives also the double cycle circle (p. 248).

[26] This is the only well-known form (*ma‘rūf fī zamāninā*) cited in the *risāla al-šarafiyya* (p. 249), but the following circle gives it twice.

[27] It is only in the *kitāb al-adwār* that we find the 16 time unit version.

[28] The version in square brackets is that implied in *kitāb al-adwār*. The *risāla al-šarafiyya* (p. 250) gives only that below, but again with the following circle giving it twice.

[29] The first two versions are recorded in the *kitāb al-adwār* (p. 150), the following three in the *risāla al-šarafiyya* (p. 251).

[30] The first version is that of the *kitāb al-adwār* (p. 151), the second that of the *risāla al-šarafiyya* (pp. 252–3).

[31] The first two versions are those of the *kitāb al-adwār* (p. 152–3), the third that of the *risāla al-šarafiyya* (p. 253).

[32] The first version is that of the *kitāb al-adwār* (p. 153), the second that of the *risāla al-šarafiyya* (p. 254–5). In the *kitāb al-adwār* it is explicitly stated that there are no optional attacks supplementary to those indicated, and the representations follow this description, despite the fact that optional percussions are added in the circular representations of the *risāla al-šarafiyya*.

[33] The longer form, termed *fāḫtī zā’id*, is found only in the *risāla al-šarafiyya* where, again, optional percussions are added in the circular representation.

[34] Or, possibly, a more inclusive ‘all non-Arabs’ (*sā’ir al-‘ajam*).

[35] p. 149.

[36] Listed in Neubauer 2008–9.

[37] The vowelling is, for once, clear: *qisam* is the plural of *qisma* ‘division’, ‘part’, but it is still a rather unexpected term in this context.

[38] In later Turkish theory this is the term for rhythmic cycles, but there is no reason to think that it has that meaning here. We shall later learn that for Ibn Kurr not every *ḍarb* is in fact an *aṣl*: a condition of the latter appears to be that it must be divisible into two parts (*far‘*).

[39] *maqsūm min* gives the sense ‘divided up out of’, i.e. ‘constituted by’.

[40] The corrections made to the first part of the definition, given in the critical apparatus to the text, are straightforward and do not require comment. But after the ‘audible sound, whereas’ we have in the original *fī al-’lhṯānī bi-ṣawt*, and the reading adopted, *fī al-āla ta’tī bi-ṣawt*, is an editorial intervention.

[41] The difference between *ḥarf* and *ḥaraka* is notional in this context: the former refers to the C element of a CV short syllable, the latter to the V element. In each case there is one attack per syllable (= time unit).

[42] *jāmi‘ al-alḥān*, p. 237.

[43] As its primary meaning is ‘way’, ‘road’, it is also difficult to see why *rāh* came to be used in this particular context.

[44] Every *ḍarb* made up of *rāhāt*, according to the manuscript, has ‘features that distinguish it from other *rāhāt*’ (*fawāṣil baynah wa-bayn ġayrih min al-rāhāt*), but this could only mean *rāhāt* as organized into another cycle, and to be presumed is a scribal slip, repeating the immediately preceding *rāhāt* in place of the original *ḍurūb*.

[45] As often, there is a degree of redundancy in the expression: ‘two sounds from the impacts of two attacks within its duration’ (*ṣawtān min īqā‘ay naqratayn fī zamanih*). Ibn Kurr’s use of *fawāṣil* (the pl. of *fāṣila*) is to be distinguished from both al-Fārābī’s use of *fāṣila* (in the generic form of a cycle, the area between the final attack and the onset of the next cycle) and al-Urmawī’s use of the prosodic term *fāṣila* (denoting the shape CVCVCVCØ).

[46] cf. Marāġī (*jāmi‘ al-alḥān*, p. 211), who speaks of *adwār-i īqā‘*, and then of *uṣūl u-furū‘-i adwār-i īqā‘ī* invented by him.

[47] Here we have ‘two sounds from two attacks on two letters (= time units) within the duration of the cycle encompassing the two subdivisions’ (*ṣawtān min*

naqratayn min ḥarfayn fī zaman al-dawr al-šāmil li-l-farʿayn), where *al-dawr al-šāmil li-l-farʿayn* needs to be understood as ‘that part of the cycle encompassing each of the two subdivisions’.

[48] Although *dawāʾir* is the plural of *dāʾira* (‘circle’), it seems not to be semantically differentiated here from (the plural of) *dawr* . Similarly, *maḥṣūr* (‘restricted’) seems not to convey anything beyond the previous *maqsūm* (‘divided off’).

[49] The theoretical difference would be that whereas *ḥarf* is inert, defining a unit of duration irrespective of whether it is actuated in sound or not, *naqra* references its potential actuation as initial attack + duration, the attack itself being conceived as instantaneous, without duration.

[50] It might, though, be justified by assuming an initial if rather far-fetched misreading of *ṯaqīl* : the shape of the initial letter, when unpointed, can be realized as *yu* just as well as *ṯa* ; the unpointed shapes of *q* and *ʿ* are fairly similar, and a smaller than average final *l* could be confused with *d* . The misreading could then have triggered the dropping of the now meaningless *awwal* .

[51] The fact that the phrase is so unexpected would explain the reaction of a puzzled copyist who tried to make sense of it morphologically, if not semantically, by supplying an initial *b* on its first appearance.

[52] We are told that the first quarter, for example, ends on the tenth *t* of the letters, by which is to be understood that its final attack is initial in the (fourth) *tan* , the *t* of which is the tenth letter.

[53] The heading for one of the variant forms further characterizes it as *ʿišrīnī* (‘of twenty’ sc. *rāhāt*).

[54] Each side is actually written with five *tan* instead of four, but this is clearly a mistake. One might note in passing an odd analogy between the square layout and the way some Indian musicians perceive the structure of the 16-time unit *tintal* .

[55] In *tinin tinin* Ibn Kurr specifies only the first vowel of each, so that *tinan tinan* would also be a possible reading.

[56] First defined as ‘the thirteenth *tāʾ* ’, with *tāʾ* , as is apparent from the further specification, standing for ‘letter’.

[57] The following discussion of a variant also applies the term *aṣl* to the *fāḥita* of (10 *rāh* =) 20 time units.

[58] Analysed in Neubauer 2008–9.

[59] Written variously as *ḫsrwānī* and *ḥṣrwānī*.

[60] According to Seydi (*Seydī’s book on music* , p. 117).

[61] Neubauer 1999–2000: p. 360.

[62] The text of the first definition is effaced to the extent that the reading is highly speculative. It is, however, confirmed by the following repeat definition. The scribe, though, seems to have understood *tīn tīn* in place of *tin layyin* , for the text continues with an incorrect ‘and after the two of them’ (*wa-baʿdahumā*) instead of ‘and after it’.

[63] There is, though, no mention of *ḫusrawānī*.

[64] This contains the only case of a mnemonic representation containing an element written with the consonants *tt* rather than *tn* . Whether construed as *tat* or *tata* it presumably represents attacks on two consecutive time units.

[65] A diminutive of *ʿarjāʾ* . We thus have here an exact semantic equivalent of the Turkish *aksak* , and associated with the same cycle, *turkī*, yet designating forms between which there appears to be no connection.

[66] *yušārikuh al-ḫurāsānī wa-ʾl-ḍarb al-turkī fīh* .

[67] There are, saving error, no attestations in Arabic texts before Širwānī . Neubauer reads, correctly, the *majalla* ms (p. 174) as *ḫabīr* , but this is, in all probability, a scribal deformation of *janbar* (< *çenber*), which is the reading given in D’Erlanger 1939: p. 206 (in the form *tšambar*). It is, we are told, the name given to *hazaj* by the people of Azerbayjan, and particularly Tabriz, thus suggesting a borrowing from Turkish usage.

[68] The text as it stands is difficult to construe. The second member begins ‘the position of the duration’ (*mawḍiʿ al-zaman*), but the general parallelism indicates that *zaman* must be a scribal slip, and the phrase should be corrected to a repetition of the initial *mawḍiʿ al-īqāʿ* in the first member. A further issue concerns the ending, ‘the first *naqra* of a *farʿ* that is completed by the second *naqra* from the beginning of another cycle’ (*awwal naqra li-farʿ yukmal bi-ṯānī naqra min awwal dāʾira uḫrā*). Having one *naqra* actuated by an attack and the other not is not problematic: the difficulty is the position of the second, and to be presumed is either that it is a slip for *rāh* , or that there is an omission, so that we have *yukmal bi-ṯānī naqra* [*min ṯānī rāh*] *min awwal dāʾira uḫrā* .

[69] *yuḍrab fī al-arbaʿ ḍurūb al-uṣūl* (*masālik al-abṣār* , pp. 357–8).

[70] The term he uses is *daqqa* . One song, for example, has 12 attacks in each cycle.

[71] For such forms of representation see Hughes 2000.

[72] Which, as noted, still survives in Marāġī ’s account. The same concept is articulated by al-Urmawī (in the *risāla al-šarafiyya* , pp. 258–9), who refers to regular down and up strokes (*tāʾ nāzila* and *nūn ṣāʿida*) of the plectrum (*miḍrāb*) and interestingly observes that budding instrumentalists need to observe an expert practitioner because of the variety of stroke patterns.

[73] Neubauer (2008: p. 131) notes a thirteenth-century reference to the frame drum (*daff*), rather than the melody instruments, being considered the ‘guardian’ (*nigāh-dār*) of the metre.

[74] The exception being *al-ṯaqīl al-awwal* , where the third and fifth of the five principal attacks (situated at time units 7 and 13) fulfil this function (*kitāb al-adwār* , p. 145).

[75] cf. Wright 1978: p. 217.

[76] In the *risāla al-šarafiyya* (pp. 252–3).

[77] They correspond, for example, exactly to what al-Fārābī terms *taḍʿīf* and *ṭayy* (Sawa 1989: pp. 47–8).

[78] *masālik al-abṣār* , pp. 354–60.

[79] As the vowelling is somewhat erratic various readings are possible, but none seems as likely as this, which suggests the notion of a gloss or commentary, possibly, therefore, pointing either generically or specifically to a form of rhythmic variation.

[80] He speaks, for example (*masālik al-abṣār* , p. 359), of *ṯaqīl bi-ʾl-daqqa al-mufrada* .

[81] *jāmiʿ al-alḥān* , pp. 225–6.

[82] Neubauer 2008–9.

[83] cf. the ‘military’ designation of the very similar *muḥarrak* pattern.

[84] Only in the *risāla al-šarafiyya* (p. 252); in the *kitāb al-adwār* (p. 151) it has ten.

[85] al-Ṭanjī 1968: pp. 103–4.

Chapter 4
Interlude: Performance Strategies and Formal Procedures

As noted above, the section on *murakkabāt* is not the last to deal with rhythmic phenomena, but as we approach the end of the first *muqaddima* it marks a transition away from conventionally fixed structures and the specific forms of variation to which a given cycle can be subjected, and the shift continues with further emphasis being placed upon processes perceived primarily in relation to the performance of a composition (*ʿamal*). Whether incidentally or not, this is accompanied by a change of vocabulary, so that alongside *ʿamal* , which in later texts will denote one particular vocal form among several[1] but is here used generically, other new terms are introduced. There is, indeed, a change in the texture of the writing, so that it might be suspected that different source materials lie in the background.
fol. 22v

4.1 *muṣṭalaḥ*

The next feature to be mentioned is, rather unexpectedly, labelled by a word normally encountered as the generic equivalent for 'technical term', and it is therefore perhaps to be taken here in the broader sense of 'conventional, customary'. But of itself that fails to indicate the nature of whatever specific (or generic) feature or process it might designate within the realm of rhythmic or performance techniques, and the brief definition we are given is rendered more difficult to grasp both by its introduction of further new technical terms and by the clotted manner in which it is expressed. It is true that the new technical terms appear bland enough: we have first *azmina* (sing. *zamān*) 'times, durations' (but distinct from *zaman* , which Ibn Kurr seems to reserve for durations devoid of attacks); and *wazn* , 'measure, metre', although it is not immediately clear, assuming a reference to musical metre, how it is to be differentiated from *ḍarb* or *dawr* or *dāʾira* , or indeed from *mīzān* , which is related to it and will be introduced in the next section. To these terminological problems must be added the more significant difficulty of the curiously compressed articulation that, it may be suggested, is not devoid of scribal error: the following commentary is thus rather tentative.

Relevant is to note, first, that this definition of *muṣṭalaḥ* may be regarded as an extension of the final section discussing a specific cycle, that devoted to *niṣf wa-rubʿ muḫammas* (3.4.11). It is here that the term first appears, in the final remark denying *aṣl* status to this cycle while calling it one among the totality of *muṣṭalaḥāt* , after which comes the brief section on *murakkabāt* (3.5.5), equally concerned to deny them *aṣl* status. Thus although there is no reference to *aṣl* in the immediately following account of *muṣṭalaḥ* it is difficult to think that this is not the context within which it is to be understood, and therefore that in some sense it must refer to a more amorphous concept encompassing a layer of rhythmic practice less well defined, and certainly less prominent, than the sharply profiled entities that constitute the *aṣl* class. There is, though, a caveat in a later section that indicates a further qualification: when one goes from an *aṣl* cycle to one that is not, the latter is a form of departure that is not considered *muṣṭalaḥ* , even if its structure is otherwise conventional. This restriction may reflect in a particularly pointed way the superior status of *aṣl* cycles, but does not seem to have a direct bearing on the way *muṣṭalaḥ* is defined, which is not as an autonomous rhythmic structure or technique of variation, but rather as a particular manner of performing a composition (*ʿamal*) initially stated to be in durations that are in association with both the measure/metre (*wazn*) and the attacks (*īqāʿāt*),[2] a rather puzzling proposition. The next occurrence of *wazn* makes it clear that it refers to musical rather than poetic metre, so that it would appear that what is being conveyed is that there is a possible manner of performance in which the durations do not match the structure of the (or a) rhythmic cycle and that this is not *muṣṭalaḥ* , whereas if they do it is. The further reference to *īqāʿāt* , a term normally associated with the *fawāṣil* , would seem to be a reinforcement of this assertion rather than a separate matter, as implicit in the match of durations and cycle is that the structure can accommodate the distinctive attacks; and if we accept the text as emended this is precisely the point that is made in the following remark, that it has attacks marking the *fawāṣil* between the durations.

Perhaps not surprisingly, the comment with which this brief definition concludes is also less than pellucid. It states that one cannot perform two novel (*mubtakar*) *farʿ* in the durations 'specific to it' (*taḫtaṣṣ bih*), and unless the 'it' is a slip for 'them', i.e. the two *farʿ* , the antecedent is presumably the rhythmic cycle, *wazn* . The distinction is not, however, crucial: the problem relates, rather, to the introduction of the notion, not previously mentioned, that a *farʿ* can be invented or imported, which seems to suggest, setting aside the possibility of simultaneity, that one should not perform two consecutive stretches, here termed *farʿ* , each with a different and, in context, novel pattern of attacks. It should also be observed that it can hardly be fortuitous that the final comment within the preceding remarks on the *murakkabāt* also deals with *farʿ* , even if the point made appears at first sight quite unrelated: concerned with how to designate a *farʿ* within a *murakkab* , it states that it is to be attributed to the original *aṣl* , whereas here we have what seems to be an injunction not to innovate twice in succession. However, a parallel of sorts can be detected in the urge to identify an element of a novel combination with its normative origin on the one hand, and on the other what may be viewed as an emphasis on the need to remain, at least for the most part, within what can be identified as belonging to the habitual, the norm, the *muṣṭalaḥ* .

4.2 *dāḫil/ḫārij*

We then have an interlinked set of complementary terms, of which the first,

4.2.1 dāḫil *('entering')*

is defined in a rather cumbersome way, accepting the text as it stands, as performing a composition 'in the metre (*wazn*) of the duration (*zaman*) of the rhythm (*ḍarb*) in the measure (*mīzān*) of which the piece was composed’. We are given no hint as to whether the terms *wazn* and *mīzān* are here effectively synonymous, or if not in what respect, but the tenor of the definition is, presumably, to perform straightforwardly, without rhythmic additions or variations, and the notion of fidelity to the original is underlined by the following statement that the attack pattern (*īqā‘*) of the cycle, by which we may understand the two *fawāṣil* attacks, is properly placed (*fī marākizih*), that is, does not deviate from the norm. There would appear, accordingly, to be little essential difference between *muṣṭalaḥ* and *dāḫil*, although the former might have referred primarily to staying within the structural limits afforded by the rhythmic cycles in general, the latter to applying the same principle of conformity, in the performance of a specific piece, to the rhythmic structures provided by the composer.

Next comes the opposite of *dāḫil*, which is

4.2.2 **ḫārij** *(‘leaving’)*

This, naturally, is defined in reverse, and in an even more compressed fashion: it is to perform a composition in a way that is either deficient (*nāqiṣ*) or excessive (*zā’id*) – and now we have virtually the same somewhat superfluous concatenation of terms – in relation to ‘the measure (*mīzān*) of the metre (*wazn*) of the duration of the rhythm (*ḍarb*) in the measure of which the piece was composed’. The first *mīzān* may be a scribal slip, but its presence or absence does not materially affect the meaning. What is not wholly clear, however, is whether Ibn Kurr is referring to reducing/increasing the length of the cycle as well as to reducing/augmenting the standard pattern of attacks, but as the former is cited in the following section, which combines *ḫārij* with *dāḫil*, we may conclude that both forms of change were intended.

4.2.3 **ḫārij dāḫil**

One would assume this to be a straightforward alternation between strict adherence to the norm and departure from it, and the main characteristic the definition suggests is a form of departure that consists of a switch of rhythmic cycles. Perhaps not surprisingly, significance is also attached to whether the cycles concerned belong to the *aṣl* category or not, despite the fact that the distinction is structurally irrelevant.

We are told that *ḫārij dāḫil* is in two parts (*qism*), i.e. of two types. The first is to leave (*ḫaraj*) one *aṣl* cycle for another, for example when performing something composed in *ṯānī ṯaqīl* (of 22 time units) to transfer (*naqal*) it to *ḫurāsānī* (of 24 time units),[3] while the second, in a piece *fol. 23r* composed in an *aṣl* rhythm, is to leave this for a rhythm that is not an *aṣl*. Taking the text as it stands, one might wish to detect a reflection of the difference in status between *aṣl* and non-*aṣl* in the fact that in the first type the term *dāḫil* is used in relation to the transfer to the target cycle, whereas in the second it is not, but is perhaps safer to assume that the rest of the phrase is missing.[4]

Ibn Kurr continues by rejecting any connection between this second type and the *muṣṭalaḥ* category even if – and here he deliberately repeats the phraseology of the *muṣṭalaḥ* definition – the association with both measure and attacks is retained (that is, in the new cycle), for the *aṣl* cycle with which it began[5] is being left for one that is not an *aṣl*, which seems less an explanation than a disapproving repetition. Since it is difficult to see how a distinction could be made between the target cycle of this second *ḫārij dāḫil* type and a *muṣṭalaḥ* variant if viewed neutrally as a string of main and supplementary attacks, we have here less a logical discrimination than a further indication of the crucial hierarchical importance attached to cycles deemed *aṣl*.

Unfortunately, no explanation is offered of how the transfer between cycles was normally carried out. Reference to al-Kindī and the Iḫwān al-Ṣafā’ shows that, unless simply stopping and starting again, there had also been at a much earlier stage a concern to effect an overlapping transition that implies an aesthetic aversion to the abrupt or strongly contrasted,[6] and given that the example cited by Ibn Kurr could be effected straightforwardly by adding a time unit in the first and third ‘quarters’ of *ṯānī ṯaqīl* (/x ẋ . x . / > /x . x . x . /), it is possible that similar criteria obtained. But he does not tell us how this particular change was made, still less whether there were conventions of appositeness to be observed: there is no way of knowing whether the shift was normally, as here, between cycles with only a small difference in the number of time units, or whether more radical transitions were also acceptable.

4.3 *maqlūb*

This next category, meaning ‘reversed’,[7] is defined, even more clumsily than before, as to perform a piece in the duration of the rhythm in the measure (*mīzān*) of the duration of which it was composed but, and this is the significant point, to bring in the distinctive *fawāṣil* attacks at points other than their original ones (*fī ġayr marākizihā*) in the composition. Since there is no suggestion of a possible change in the dimension of the segment of the cycle separating them – and any such change would in any case render them ineffective as signifiers – it must be assumed that they would move in tandem. No indication is given of any restrictions on the positions they might occupy, but it would be reasonable to surmise that total freedom was unlikely, and that from its normal position on the penultimate time unit of the cycle the second attack was most likely to be shifted, depending on the structure of the cycle, to the penultimate unit of the first *far‘* or to that of the first or third quarters.[8] In any event, it can readily be seen from the examples in 3.7.2 that al-Urmawī’s disposition of the *ḍarb al-aṣl* (= *fawāṣil*) attacks could be absorbed, according to Ibn Kurr’s analysis, into the *maqlūb* category.

It may also be observed that the existence of such positional variation(s) implies more strongly, unless the *fawāṣil* could be marked contrastively through dynamics or timbre, that the reduction of a cycle to just two distinctive attacks was likely to happen only intermittently, and after the full form had been well established.

4.4 *dawr* and *‘amal*

There follows another set of interrelated if contrastive categories, involving now these two terms, that explore different performance options with regard to the relationship between the composition and the rhythmic cycle. The first is:

4.4.1 **ṣaḥīḥ al-dawr** ***('true to the cycle')*** [9]

Literally rendered, it is to perform a composition in the metre (*wazn*) of the cycle (now termed *dawr*) of a given rhythm (*ḍarb min al-ḍurūb*), beginning (*duḫūl*) on the [first] *rāḥ* and finishing (*infiṣāl*) [10] on the *rāḥ* that marks the completion (*takmila*) of the time unit total (*'adad*) of the cycle, i.e. the final one; [11] and to this is added the specification, if the reading suggested in place of the faulty formulation of the original is correct, [12] that it is to perform the piece, beginning from the point of entry, without letting any duration pass (*min ġayr tafwīt zaman*) without composition (*'amal*), that is, without allowing any gaps.

Within the first part of the definition, to indicate that normal compositional practice required that the end of a piece would normally coincide with the end of a cycle is probably doing no more than state the obvious: the question, rather, is the import of what precedes. Given the name of this category, noting that the performance adheres to the structure of a rhythmic cycle seems otiose, while the following remark states baldly that one begins on a *rāḥ*, and since the beginning of a piece does not necessarily coincide with the onset of a cycle (the possibility of beginning elsewhere than on the first time unit of a cycle is quite explicitly recognized, indeed codified, below) it may be suggested that a feature of this category was that it did, and that the text has lost the word 'first'.

The contrast between the generic reference at the outset to 'a given cycle' and the specificity of the formulation used for the preceding category, *maqlūb*, which refers to the cycle in which the piece had been composed, is probably unimportant. The way songs are recorded by al-'Umarī confirms that the identity of the rhythmic cycle was intrinsic to a composition, thus excluding the possibility that in *ṣaḥīḥ al-dawr* the performer could determine which cycle to use. What crucially distinguishes *ṣaḥīḥ al-dawr* would seem to be the combination of the initial reference to beginning at the beginning of a cycle and ending at the end with the later emphasis on the seamless performance of a composition from beginning to end without a break. As it is clear from what follows that it was indeed possible to insert gaps in the course of a performance, it makes perfect sense to consider as a category performances in which this option was not taken, and the original mapping of melody onto rhythmic cycle was maintained throughout.

We then have:

4.4.2 **ṣaḥīḥ al-'amal lā ṣaḥīḥ al-dawr** ***('true to the composition, but not to the cycle')***

the account of which begins by stating that it is to perform a piece with part of the cycle (*ba'ḍ al-dawr*), by which must be meant that of the original composition, and to end (*infaṣal*) on an attack (*īqā'*) of another cycle. The 'ending' here is not of the whole piece but, given the following reference to repeating, presumably of part of the initial cycle, so that the sense would seem to be that before cycle *a* is completed there is a switch of cycles at a point interpretable as an attack (perhaps one of the *fawāṣil*) in cycle *b*. We are then told that if repeated, part of a cycle is allowed to elapse (*yufawwit zamanan min dawr*) without composition until reaching the initial point again (*ilā bāb bih allaḏī*
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daḫal minh), at which one recommences. Thus, Ibn Kurr repeats in conclusion, part of the cycle is performed as a duration without composition, ending on an attack (*īqā'*) of the cycle too. This rather cryptic latter part of the definition fails to specify which cycle is which, but the likelihood is that cycle *b*, the interloper, is the one that continues without the composition, that the composition resumes when the initial point in cycle *a* is reached, and that it is to this point that the final remark refers, 'the cycle' being cycle *a*. The repeat thus involves the same process of changing cycle, but in reverse, the elapsed part of cycle *b* allowing the integrity of the composition to be maintained: gaps are inserted in the composition where there is a transition to cycle *b*, but it is not detached from its original rhythmic moorings. There is no indication, though, of the point at which the process is repeated, whether after the whole melody, the setting of a single line or hemistich, or straightforwardly within the next rhythmic cycle.

The final member of this group is

4.4.3 **ṣaḥīḥ al-dawr ṣaḥīḥ al-'amal** ***('true to the cycle and to the composition')***

It is curtly defined, in a contrastive echo of the previous account, as performing the cycle (*dawr*) with the full composition (*kāmil al-'amal*) and ending (*infaṣal*) on an attack (*īqā'*) without letting any duration pass (*min ġayr tafwīt zaman*) without composition. This conforms fully to the expectation that it would designate performing a composition in its original form, with no gaps inserted and no changes of cycle. But however unproblematic the definition, we are left with the slight puzzle that there is no discernable difference between *ṣaḥīḥ al-dawr ṣaḥīḥ al-'amal* and the humbler *ṣaḥīḥ al-dawr* ….

After the interpretative challenges of this group it comes as something of a relief to encounter next a quite straightforward set of distinctions.

4.5 *qabl* ('before'), *ma'* ('with') and *ba'd* ('after')

These refer, respectively, to starting the composition before the beginning of the cycle, with the first attack (*īqā'*) of the cycle, which in this context one may presume to mean the first time unit and not the first of the two *fawāṣil* attacks, [13] or at any point after the first attack of the cycle and up to the end of the cycle. There is, nevertheless, a logical difficulty, for if, as is expressly stated, 'after' can extend as far as the end of the cycle, it will at least overlap with 'before', and could, indeed, render it redundant. One might guess that 'before' related to the singer beginning before the instrumentalists initiated the cycle, whereas with 'after' the cycle was already being realized by the instrumentalists when the singer started, but Marāġī informs us that in fact the contrary is the case: with 'before' it is the instrumentalists who start first, with 'after' it is the singer. [14] Also not wholly clear from Ibn Kurr's terse formulation is whether his generic phrase 'to perform the composition' (*yu'tā bi-*

’l-‘amal) implies that the performer was free to vary the position of the composition in relation to the cycle, or whether it refers to the position of the beginning in the original composition. In relation to the latter it is instructive to note that the two extant examples of notation in which the position of the beginning is specified in relation to the cycle are of compositions that start on the second time unit [15] (and thus not, incidentally, on the first time unit of a *rāḥ* , as Ibn Kurr stipulates); while in relation to the former one may point to the more extended discussion devoted to this topic by Marāġī , in which he emphasizes that performers of intellectual ability (*quwwat-i ḏihn-i waqqād*) and refined sensibility (*ṭab‘-i laṭīf*) are able to shift the beginning of a composition to any position within the cycle, but without changing the words, presumably implying thereby that the position of the end would move in tandem with the beginning. Again, we are faced with a form of rhythmic counterpoint created by the dislocation of the vocal line from its original moorings, and although such subtleties were evidently a mark of expertise in performance, it is not surprising to encounter in his final comment a recognition that the norm was still to adhere to the composer’s original intentions. [16]

The term *qisam* included in the title of the first *muqaddima* might relate to some of the above, but equally it might suggest more obviously formal features, so that it is possible that it designates primarily the few remaining terms, which adumbrate major formal categories. The first two to be mentioned are *basīṭ* and *našīd* , and it will by now come as no surprise to note that that they do not appear as part of the formal terminology used by al-Urmawī . Like *‘amal* , they will appear in later Systematist accounts, [17] but among Ibn Kurr’s predecessors it is to al-Tīfāšī that we must turn for a reference – albeit only to the second term – and as the description he supplies is in the context of his general account of the repertoire of al-Andalus it is of dubious relevance, given the stylistic cleavage between al-Andalus and the east to which he insistently draws attention. An immediate difference between their two accounts is that for al-Tīfāšī the *našīd* is the first of the four constituent elements of the *nawba* suite form, [18] while for Ibn Kurr it is preceded by the

4.6 *basīṭ*

This he defines generically as a composition without interpolated (*yataḫallaluh*) verse text, presumably, therefore, to be sung to nonsense syllables. In one type it is bounded (*yanḥaṣir*) by the structure of a rhythmic cycle (*zaman ḍarb maqsūm*), and in another, in contrast, it is bounded (*yaḥṣuruh*) by a continuous flow of *rāḥāt* (*zaman al-rāḥāt al-mustarsila*), that is, has a regular pulse but is not in any specific cycle. The former type is called *istibdā’* (‘beginning’), the latter *bīšrūḥ* . [19] In the form *bīšrūn* this term is recorded by al-Umarī , [20] who defines it in some detail, but in a fundamentally similar manner, as consisting of melodies that exceed the measure of a verse (*anġām taṭūl ‘alā miqdār bayt al-ši‘r*): it adheres to the length of an expression (*yaqbiḍ ‘alā wus‘ ‘ibāra*), and is filled up with various concocted utterances (*yusadd bi-anwā‘ al-kalām al-mulaffaq*) – possibly a reference to nonsense syllables – that are constrained by neither metre nor rhyme (*allaḏī lā yuḥṣar bi-wazn wa-lā qāfiya*).

Among later writers Marāġī defines *basīṭ* quite differently, if rather laconically. For him it is less a separate form than a separate (*mufrad*) piece, in the sense that any of the four or five movements of the *nawba* , performed independently, is called *basīṭ* . [21] This implies that the language of the verse could be either Arabic or Persian, and that it would be structured according to the standard A A B A song form, one which nevertheless allowed a degree of variation in the level of complexity of its constituent parts. As Ibn Kurr fails to comment further, there is nothing to indicate that the *basīṭ* with which he was familiar was not similarly structured, but it was certainly markedly different with regard to verbal texture (absence versus presence of verse) and, in one of its forms, rhythmic texture (absence versus presence of a rhythmic cycle). This latter type, the *bīšrūḥ* , is recognized by Marāġī and other Systematist theorists as a separate form, the *pīšraw* . In discussing it, Marāġī indicates that it was already known to Šīrāzī , a little before Ibn Kurr, for he cites him [22] – as usual, with expressions of the greatest respect that preface an attack on his views – to the effect that there is often a rhythm (*īqā‘*) that is not cyclic (*bīdawr*), as in the *pīšraw* . This is completely in accord with Ibn Kurr’s definition, whereas Marāġī objects to it not because it is untrue but because it is incomplete, since for him the *pīšraw* may also be in a rhythmic cycle, and indeed more frequently is. The distinction is, in essence, one of semantic range: for Marāġī *pīšraw* also subsumes what Ibn Kurr calls *istibdā’* , and appears, in consequence, to be equivalent to Ibn Kurr’s *basīṭ* . [23]

4.7 *našīd*

This, in contrast, is defined by Ibn Kurr as a verse setting (*ši‘r mulaḥḥan*). It also differs somewhat from the *basīṭ* in its rhythmic organization, which is first described as not being subject to a rhythmic cycle at all (*bi-ġayr zaman ḍarb*

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maqsūm yaḥṣuruh jumlatah), and as there is no mention here of a continuous flow of *rāḥ* , and therefore no indication of a pulse, one may conclude that it was in free rhythm, and quite possibly with the metrical structure of the verse providing the principal mechanism of temporal organization. The definition then continues by echoing the structure of the *basīṭ* definition, seemingly contrasting a type that is bounded with another that is unbounded, but it fails to add sufficient detail for clarity to emerge. In the former, part of the piece is subject to a rhythmic cycle (*ḍarb maqsūm*), while the latter is not, but is left without any further specification, which is logically puzzling, since as it stands it is subsumed by the initial definition and is therefore redundant. Sense could be restored if we assumed that the elegance of the repetition of the syntax in the previous *basīṭ* definition was achieved at a cost, and that the contrast was not between two different types but between two different parts of the same type, one subject to a rhythmic cycle, the other in free rhythm. [24]

Despite being distant both geographically and temporally, the comments on *našīd* by both al-Tīfāšī and Marāġī do suggest parallels with this conjecture. For al-Tīfāšī the Andalusi *našīd* consists of an *istihlāl* (‘beginning’) followed by an *‘amal* , and progresses from grave to gay: implied is a degree of tempo acceleration, quite possibly combined with a transition from unmetred (in the *istihlāl*) to metred, [25] and the same transition occurs in what Marāġī terms *našīd-i ‘arab* – he is quite insistent that this is a specifically Arab form, sung to Arabic verse.

Given that restriction, it is rather surprising to find a Persian treatise written in Samarkand devoting a great deal of attention to it, but in addition to his succinct description Marāġī actually provides an example to demonstrate its structure, giving the verse, specifying the various sections, and commenting on the modes used.[26] The description stresses the alternation of sections in a rhythmic cycle (*ma‘ al-īqā‘*) with others in free rhythm (*bilā īqā‘*), and adds that the preferred cycles are *ramal* and *muḫammas*.

The example consists of a first section (*ṭarīqa-i jadwal*) consisting of a free-rhythm couplet followed by a second couplet in an unspecified rhythmic cycle, and the following two sections are organized in the same way. For the first of these (*ṭarīqa-i maṭla‘*) some modal details are given, while the second, to judge by its title (*ṣawt, a‘nī miyānḫāna*), would have functioned as a contrasting section. In the light of al-Tīfāšī's comments it is instructive to note that in each section the lines in the second couplet are markedly shorter than those in the first, and as another possibly tenuous and musically insignificant connection one may note that in the second and more especially in the third sections rhyme patterns appear that are familiar from the *muwaššaḥ*.

4.8 *ḫafīf*

Already noted is the surprising absence of this term from Ibn Kurr's inventory of the rhythmic cycles, whether as a contrastive marker helping distinguish *ṯaqīl* and *ḫafīf* pairs, as in the earlier literature, or as the name of a specific cycle. In this latter use it pre-dates Ibn Kurr: it is first noted by Šīrāzī, and subsequently by Marāġī and later Systematist theorists before becoming a staple term within the Ottoman *usul* repertoire.

Equally surprising is to encounter it designating a form, as it is not part of the formal vocabulary employed by al-Urmawī, Šīrāzī or Marāġī. According to Ibn Kurr it is a verse setting (*ši‘r mulaḥḥan*) comprising two lines (*bayt*) or more. It is a condition that the setting (*waḍ‘*) of the beginning – presumably the first hemistich – of the second verse should be different to the beginning of the first verse, thus constituting a part called medial (*wasṭānī*). If, however, the beginning of the second verse is like the beginning of the first verse then it is the 'simple' (*sāḏij*) form, even if both are bounded by the 'duration of a rhythmic cycle' (*zaman ḍarb maqsūm*).[27] Assuming a setting of two lines of verse, this is a clear indication of an A A B A structure, and the parallel with Systematist accounts is reinforced by the designation of the contrastive section as *wasṭānī*, a direct equivalent of Marāġī's Arabic *bayt al-wasaṭ* = Persian *miyānḫāna*. In consequence, Ibn Kurr's *ḫafīf* appears to correspond to Marāġī's *basīṭ*, just as Marāġī's *pīšraw* appears to correspond to Ibn Kurr's *basīṭ*. But more important here than any terminological slippage between different areas is the overriding similarity between the structures they designate.

What is not clear is the extent to which the above survey of formal features is more than perfunctory. It is certainly informative, but does not give the impression of seeking to match the evidently comprehensive attention devoted to the rhythmic cycles and modes. There is no reason to think that all the forms later described by Marāġī would have been familiar to Mamluk musicians, but there are still some surprising omissions: several of the songs for which al-‘Umarī provides details are described as *qawl*, yet this important form receives no mention; and equally absent is any reference to the *nawba*, of which al-Urmawī is reported to have composed several. Either, then, Ibn Kurr is being casually selective, or these forms were still marginal in Cairene practice, just entering the repertoire but not yet sufficiently established for him to feel the necessity to include them.

4.9 *varia*

The last brief section leaves form behind to add a few gnomic evaluative pronouncements – Ibn Kurr is evidently now making a dash for the finishing line. It begins by referring to *mu‘āwana* ('help', 'assistance'), another category or, perhaps better, concept that receives no mention in the Systematist literature. Defined even more curtly than usual, it is equated with keeping up (*mulāḥaqa*), and not trying to get ahead or compete (*musābaqa*) – a perfect encapsulation of the desirability of ensemble unanimity and togetherness.[28]

Somewhat obscure, in contrast, is the comparison that follows. If the reading proposed is correct, it opposes the ugly (*faẓī‘*), qualified as *dāḫil*, to the loud-voiced (*ṣayyit*),[29] qualified as *ḫārij*. But to the obvious assumption that the two qualifying terms relate, as above, to entering or leaving a rhythmic cycle may be opposed the vocal reference of *ṣayyit*, reinforced by the following remark to the effect that we are dealing with something the Persians call *nāsāz* ('dissonant', 'discordant').[30] It appears, then, that we are leaving the world of duration and entering that of pitch, so that the meaning becomes, approximately, that an ugly [voice] that remains within [the desired pitch or pitch range] is worthier or more appropriate (*awlā*) than an imposing voice that does not. That it is in this area at least that the sense lies is underlined by the dictum following the reference to *nāsāz*, irrespective of whether it is regarded as independent rather than a continuation: it states that whoever knows his/her register (*ṭabaqa*) is at ease (*istarāḥ*), which one may suppose to refer specifically to the singer's familiarity with his/her vocal range and hence the ability to choose a pitch where the voice lies comfortably and can be accurate and not under strain.

There follows, finally, a second evaluative comparison, but one much more straightforward this time: a composition bounded by a rhythmic cycle (*zaman ḍarb*) is worthier (*awlā*) than one that is not, even if pleasant (*muṭrib*). This order of preference is hardly surprising; indeed, given the amount of attention paid to the structure of the rhythmic cycles and their manifold variations, it was only to be expected. It can be regarded as a foretaste of the more doctrinaire denial of value expressed in the Ottoman tradition to music the rhythmic organization of which falls outside the recurrent patterns of a recognized *uṣūl* cycle.[31]

[1] e.g. by Marāġī (*jāmi‘ al-alḥān*, p. 250).

[2] ‘In association with’ is a neutral rendering of what could be read as either *muṣṭaḥib* (‘accompanying’, perhaps the more obvious reading) or *muṣṭaḥab* (‘accompanied by’). The difference is of no significance here, since it does not matter whether *a* accompanies *b* or *b* is accompanied by *a*. The original is *fī azmina muṣṭaḥi/abat al-wazn wa-lahā īqā‘āt muṣṭaḥi/abat al-īqā‘āt fawāṣil bayn al-azmina*, where the repetition of *īqā‘āt* in *lahā īqā‘āt muṣṭaḥi/abat al-īqā‘āt* is obviously a result of scribal error. The simplest resolution of the difficulty is to assume a transposition, so that we have *fī azmina muṣṭaḥi/abat al-wazn muṣṭaḥi/abat al-īqā‘āt wa-lahā īqā‘āt fawāṣil bayn al-azmina*.

[3] The text has a repetition here that is surely due to scribal oversight: for ‘this [piece] enters in this [cycle]’ (*hāḏā dāḫil fī hāḏā*) twice we should read ‘this [piece] leaves this cycle and enters the other’ (*hāḏā ḫārij ‘an hāḏā wa-dāḫil fī hāḏā*).

[4] Here we just have ‘it leaves’ (*hāḏā ḫārij*).

[5] Although this is obviously the sense, the word itself is difficult to decipher (if anything, it looks like *lāmṯnāh*), and the reading *li-’btidā’ih* is correspondingly tentative, especially as one would not expect to find it followed, as here, by *‘alā*, or later by *wa-ḫaraj* rather than *wa-ḫurūjih*.

[6] See Wright 2010: p. 69.

[7] Also ‘inverted’: the upside-down vertical potential of the metaphor will later be used by Ibn Kurr in relation to pitch, whereas here it is the horizontal time line that is at issue.

[8] One might compare here Širwānī’s account (D’Erlanger 1939: p. 185) of the *ḍarb al-aṣl* attacks in *ṯaqīl awwal*, where as an alternative to the expected positions, time units 1 and 13, he gives 9 and 13, thus maintaining the 12 : 4 relationship, but beginning from time unit 13.

[9] The semantic range of *ṣaḥīḥ* stretches from ‘sound, genuine’, to ‘complete, whole’ to ‘true, valid’.

[10] Normally meaning ‘separation’, ‘becoming detached’, in the light of what follows the sense of *infiṣāl* here seems to be rather that of ‘termination’ (cf. Dozy *infaṣal al-amr ‘alāḏālik* ‘la chose se termina ainsi’). The normal antonym of *duḫūl* is *ḫurūj*, but this seems to be reserved, as in the section *al-ḫārij al-dāḫil*, for leaving one cycle for another (and the only other way Ibn Kurr indicates ending a cycle is to refer, after *takmila*, to the last time unit as a ‘duration pending’).

[11] Vowelling is given on the last syllable, pointing to the reading *‘alā rāhin yukmiluhu ‘adadu-’l-dawr*, i.e. the time unit total of the cycle rounds off the (final) *rāh*. This has attractions as a *lectio difficilior*, but does not quite make sense, and to be preferred is the standard term encountered elsewhere, *takmila*, which would yield the rather more obvious *‘alā rāhi takmilati ‘adadi-’l-dawr*, i.e. the *rāh* that marks the completion of the time unit total of the cycle. Both readings, though, produce the same end result.

[12] That is, *ta’tī bi-’l-‘amal min makān al-duḫūl* in place of *ta’tī bi-’l-duḫūl min makān daḫal*.

[13] That it is the first time unit is stated explicitly by Marāġī (*jāmi‘ al-alḥān*, p. 230).

[14] *šarḥ-i adwār*, ed. T. Bīniš (Tehran 1370/1992), p. 379.

[15] Notated by Šīrāzī (Wright 1978: p. 233) and Binā’ī (Wright 1994–5).

[16] *jāmi‘ al-alḥān*, p. 230.

[17] Marāġī (*jāmi‘ al-alḥān*, p. 241) lists nine forms, including *basīṭ, našīd-i ‘arab, ‘amal* and *pīšrū*.

[18] al-Ṭanjī 1968: p. 114.

[19] Not found in classical dictionaries, *istibdā’* may well be a calque of the Persian *pīšraw* (‘prelude’), from which *bīšrūh* is derived.

[20] *masālik al-abṣār*, p. 329.

[21] *jāmi‘ al-alḥān*, p. 247. What Marāġī calls *nawba* should not be confused with the Andalusi form as described by al-Tīfāšī: the two have quite different constituents.

[22] *šarḥ-i adwār*, p. 252.

[23] To be noted is the later retention of a pulse form embodied in Širwānī’s definition of *ḍarb bīšrū* (D’Erlanger 1939: p. 219), which he gives as *tananan* with only an initial attack, i.e. a pulse at a fairly leisurely tempo.

[24] Thus assuming that *fa-minh māyanḥaṣir baḍuh fī ḍarb maqsūm wa-minh mālāyanḥaṣir* is imposed upon an underlying *fa-minh māyanḥaṣir ba‘ḍuh fī ḍarb maqsūm wa lāyanḥaṣir baḍuh al-āḫar*.

[25] al-Ṭanjī 1968: pp. 103–4.

[26] *jāmi‘ al-alḥān*, pp. 249–50.

[27] It might be argued that the phrasing allows the possibility that one type or the other might optionally not be in a rhythmic cycle, but this is surely to force the syntax unduly: the emphasis is on the non-contrastive type being deemed simple despite the degree of complexity associated with the use of a rhythmic cycle in both.

[28] Which one might expect to be expressed, rather, by the related term *ta‘āwun*.

[29] Although not the most obvious pair to contrast, the alternatives are worse: the former could be read as *qaṭī‘*, but this makes no sense here and hardly any more if detached and regarded as part of the preceding definition; while for the latter (which is unpointed) more than one other reading is possible, with none having anything to recommend it in this context.

[30] As used by al-Bilbaysī (*al-mulaḥ wa-l-ṭuraf*, British Library Add. 19411, fol. 76r), *nāsāz* clearly means ‘out of tune’. It is tempting to identify this term with the modern *našāz* (‘dissonance’), and assume that it should be *nāšāz*, but we are more probably dealing with a semantic coincidence: the long first vowel points away from Arabic morphology and towards a Persian borrowing, i.e. *nā* (negative prefix) + *sāz*. Despite his strenuous rejections of Persian views, Ibn Kurr raises no objection to the technical use of Persian loanwords.

[31] The objection is clearly articulated by Cantemir (Behar 2001: p. 102).

Chapter 5
Mode

The second *muqaddima*, the final section of the work, follows the format of the first in that it begins with what might be called a theoretical introduction, even if it does not announce itself as such, followed by an extensive series of descriptions of individual items. Ibn Kurr's initith definitions of concepts do not have obvious antecedents, even though the first, that of *naġam*, is stated to be derived from earlier authorities, but they are, in any event, sufficiently different from al-Urmawī's formulations to provide yet another indication that he was unfamiliar with Systematist theory, and they consequently need to be examined, together with the remainder of the introductory exposition, as an autonomous body of theoretical propositions. Although coherent, this material is expressed – a sign of things to come, even if one that by now hardly comes as a surprise – in ways that are not always immediately transparent, however straightforward the vocabulary: at times they tend to be rather compressed, while at others the logical sequence is less than wholly clear.

5.1 Terminology

Accordingly, rather than being able to offer a brief synthesis, parallel to that proposed for the key terms dealing with duration and rhythm, there is a need to discuss each one separately and, where appropriate, in conjunction with the others. In Ibn Kurr's order of presentation, the initial set of terms consists of: *naġam* (pl. *anġām*), *ṣawt, hank*, [1] *ṭabaqa*, and *naġma* (pl. *naġamāt*), and in moving from the domain of duration to that of pitch the second *muqaddima* begins

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with the assertion that it comprises the science (*'ilm*) of *anġām*, which we may understand to mean 'modes'. [2] It is stated to be the plural of *naġam*, which, according to Ibn Kurr, was defined by earlier authorities (*man taqaddam min al-salaf*) as a *ṣawt*, one that, literally rendered, is qualified as 'complete' (*kāmil*) and 'moving' (*mutaḥarrik*), and to this is added that it comprises (*ištamal 'alā*) harmonious (*mulā'im*) notes (*naġamāt*), a further specification that could be part of the inherited definition but is more probably a clarification thought necessary by Ibn Kurr. It is echoed immediately in the following statement that every *ṣawt* comprises specific notes (*naġamāt maḫṣūṣa*) characterized in a specific way (*'alā ṣifa maḫṣūṣa*) that arouses pleasure (*ṭarab*). As a result of his screening out random (non-consonant) successions of pitches first and then injecting the vital ingredient of the emotional domain that needs to be satisfied, what emerges quite clearly as Ibn Kurr's understanding of *ṣawt* in this context is that it designates a well-formed melodic structure, one that fulfils congruent and complementary technical and aesthetic criteria. [3] This, it may be noted, is markedly different from the sense first introduced by al-Urmawī, for whom *ṣawt* designates sound viewed as the initial raw material of music: to become a note, *naġma*, it needs to be qualified. [4] Comparable to this, though, is Ibn Kurr's earlier definition of an attack as something that causes an audible *ṣawt*, that is, sound, and although this specific meaning of the term fails to reappear in the second *muqaddima* he does refer below to an important note that can be prolonged as an extended *ṣawt*. In a further usage, it appears in the *kitāb al-adwār* as a label for a vocal composition or form, being contrasted with *ṭarīqa*, an instrumental rendition of the same melodic material. [5] As *ṣawt* elsewhere means simply 'voice', its semantic field seems to extend from sound to voice to melody to song to song form, thus being sufficiently elastic to allow these two theorists to select different segments for emphasis at different times.

The general thrust of Ibn Kurr's account is thus far clear, and there is nothing problematic about the meaning of the last terms to be introduced: *naġma* (pl. *naġamāt*) equates readily with 'note' (or 'pitch', this sense being emphasized later), and *mulā'im* with 'harmonious', but viewed horizontally, that is, as a succession of pitches that stand in a consonant relationship with each other. [6] But the precise import of the two initial adjectives qualifying *ṣawt* is not so readily apparent. The second, *mutaḥarrik*, is familiar from earlier discussions of rhythm, being one of the terms derived, through prosody, from descriptions of the Arabic script, in relation to which it refers to a letter (= consonant) that is followed by a short vowel, thus facilitating a 'movement' on to the next letter. The musical equivalent is the progression from one time unit (or *rāh*, pair of time units) to the next, with the implication of a forward melodic flow, of movement from note to note. Rather less easy to attach a precise meaning to is the first adjective, *kāmil*, which covers the range from 'full' and 'complete' to 'perfect'. Its occurrence elsewhere in the *ġāyat al-maṭlūb* as a technical term is unhelpful, as the context is quite unrelated, [7] and although one might first be inclined to take it narrowly, referring to the fullness of the sustained pitch that distinguishes a musical note from raw sound, the second adjective pulls away from this towards a more inclusive sense encompassing an aesthetically satisfactory and ample use of modal resources. [8]

In any event, by being equated with *ṣawt* the initial term *naġam* is defined in a way that makes it clear that we are dealing with a complex entity made up of a number of notes, and to the extent that the concept of melody already inheres within *ṣawt* it would appear that what is implied by *naġam* is something more general, a move beyond any specific instance to the more abstract level of scale or, more probably, mode, and the likelihood that this is so is reinforced by the fact that *ṣawt* will recur later in the *muqaddima* as a label attached to a particular group of modes. It may be noted that the meaning of 'mode' is one that *naġam* may still bear today, especially in the context of the Iraqi *maqām* repertoire, [9] and it is interesting to find in the *ġāyat al-maṭlūb* a sharp and seemingly rather novel distinction between it and *naġma*, for in earlier writings the situation is somewhat less clear, with *naġam* often being used as a plural of *naġma*, while the scale/mode area is more usually represented by *laḥn*, a term no longer used by Ibn Kurr. [10]

These initial definitions are followed by what seems at first glance to be an odd and somewhat illogical digression informing us that the non-Arabs (*'ajam*), in this context presumably the Persians, do not call (*sammā*) 'it' a *hank*. The closer antecedent of 'it' is *ṣawt*, but since *ṣawt* is a vehicle for the definition of *naġam* it could reasonably be thought to refer in the first instance to the latter, in other words to suggest that among Arab musicians, but not among Persians, *hank* was used as a substitute for *naġam*. At the same time, however, the formulation points to a contrast between the *‘ajam* and the previously mentioned earlier authorities, thereby implicitly equating them with the moderns (whom al-‘Umarī identifies by their use of novel Persian terminology) and thus leaving them, whether Persian or contemporary Cairene, with a second term, *hank* , which is held not to be used as an equivalent to *naġ am* . What lies behind this rather unexpected and seemingly pointless negative formulation is probably not the obvious, if unstated, linguistic fact that Persian musicians preferred other modal designations such as *parda* but rather a degree of overlap within the terminological hierarchy. Between the generic *naġ am* and the names of individual modes this includes terms, one of which is *hank* , that designate particular groups of modes, and to be suspected is a degree of semantic slippage allowing *hank* to be used, in effect, as an equivalent of *naġ am* . In what follows we find that a number of modes are categorized as *hank* (just as others are categorized as *ṣ awt*), but if this gives some indication of its normal range it is clear that for Ibn Kurr it was still being used too loosely, for he proceeds to gives a structural reason that would restrict its applicability: for him, a condition of *hank* is that it is should be one of four[11] pleasing (*muṭ rib*) *aṣ wā t* (pl. of *ṣ awt*), the lowest (*asfal*) ascending (*šā l*) to the highest (*a‘lā*) and the highest descending (*ḥ aṭ ṭ*) to the lowest, all of them,[12] accordingly, called *hank* , and to the notion this conveys of modes being characterized by opposed trajectories the later discussion of this group of four will add that the way in which they are ordered is determined by how high they rise in pitch, and questions of pitch are also conveyed in more general terms by the explanation that now follows.

If we wish to understand this state of affairs, Ibn Kurr informs us, we must delimit (*ḥ addad*) a ‘layer’ (*ṭ abaqa*) – which we may assume to correspond here to a particular segment within the total set of pitches – the extremities (*ṭ araf*) and middle (*wasaṭ*) of which are known,
fol. 25r
as are the notes it contains; and to this he adds the interesting (if hardly illuminating) explanatory analogy that a *ṭ abaqa* consists (*inḥ aṣ ar*) of notes just as rhythmic cycles consist of *rā hā t* . Each of the resulting individual entities will, we are told, be discussed in due course – a clear reference to the ensuing catalogue of modal descriptions – and the ground is then gone over again in a more condensed, abstract statement to the effect that a *ṭ abaqa* is what is needed for segmenting the whole range of notes (*naġ amā t*) of the gamut, from the lowest to the highest: it is, in effect, a conceptual tool used later to locate a particular note – given that the note names recur several times at different pitch levels – in the appropriate zone.[13] In Systematist treatises this term has an evidently similar sense, but is used rather more precisely: within an octave scale the lower tetrachord is called the first *ṭ abaqa* and the upper pentachord the second.[14]

Having begun the second *muqaddima* with the statement that its subject matter, *anġā m* , is the plural of *naġ am* , Ibn Kurr now gives a parallel formulation for *naġ amā t* , introduced as the plural of *naġ ma* . In the definition that follows he reverts to the association with duration; there is, in fact, quite surprisingly, no reference to pitch at all, a *naġ ma* being explained as an utterance (*nuṭ q*) of the duration of two letters or of a similar order (*mā ḥ ā kā ḏ ā lik*). In illustration, a number of suitable (*munā sib*) letter pairs are given: *t + ā , t + n, n + ā , n + n* , relatable to the mnemonic syllables used in the representation of the rhythmic cycles.[15] However, the proviso is added that the second letter should not be extended (*madd*), thereby becoming over-long (*zaman zā ’id*), with the exceptions of the note called *rast* and of *mā yā h* :[16] notes must follow one another regularly (*muwā lā h*). (The reference to *rast* and *mā yā h* is clarified later: duration is used as a means of expressing the importance of the *rast* notes and, similarly, an emphasis on the length of the first note is a marker of the mode *mā yā h* .)

The previously stated parallel between a fundamental note duration set at two letters and the similarly defined fundamental rhythmic unit, the *rā h* , is then placed in a functional context: the note (*naġ ma*) is the basis of the modes (*anġā m*) just as the *rā h* is the basis of the rhythmic cycles (*ḍ urū b*). Aware, however, that the pertinence of the analogy is undermined by the previous expression of the pitch unit in terms of fixed duration, Ibn Kurr adds a qualification allowing flexibility. It states that the letters of the *naġ ma* are incorporated (*tandarij*) within a composition (*‘amal*) to produce pitches of shorter (*taqill*)
fol. 25v
or longer (*tuzā d*) durations (*azmina*), while retaining (*baqā ’ isti‘mā l*)[17] their long vowels (*maddā t*),[18] which may reasonably be interpreted to mean that longer pitches may be defined as concatenations of shorter ones, expressed as letters, but that shorter pitches are not so short that long vowels are reduced. This is in contrast to (the implied stability of) the duration of the letters of the *rā h* , which, he continues, is necessary in order to establish the pattern of durations within a rhythmic cycle (*li-ḍ abṭ mawā zīn azminat al-ḍ urū b*).[19] Assuming this to be the correct reading of a somewhat approximate passage, the point made is an eminently sensible counter to the earlier insistence on regularity: while the pulse of the time units making up the rhythmic cycle is steady, the duration of the notes of the melody is variable.

5.2 Scale

Ibn Kurr now turns his attention to the range of pitches and their denomination. The initial scalar matrix, that to which the ensuing description of the modes relates, is one of stark simplicity, and it is here that his presentation, devoid of analytical complexities, most obviously contrasts with Systematist texts. There are no string lengths or ratios, so that we are not told what any of the intervallic relationships are: the reader is evidently deemed to be in possession of this knowledge; and equally absent is the tetrachordal grammar and all the paraphernalia of possible octave scales and transpositions that flow from it. Ibn Kurr begins by referring to *ṭ abaqa* , designating now not a segment of the gamut but the whole range of pitches,[20] for he proceeds to say, speaking in the first person, as if presenting his own analytical findings, that he has divided (*qasam*) and delimited (*ḥ aṣ ar*) it, and found it to be comprised (*inḥ aṣ ar*) of 21 notes rising successively in pitch from low (*layyin*) to high (*ḥ ā dd*).[21] They are then named: they consist of six notes called *rast* ,[22] with between them five called *ramal* ,[23] five called *dū kā h* , and five called *sā kā h* , such that between each two *rast* notes there are, in ascending order, a *ramal* note, a *dū kā h* and a *sā kā h* .

We thus have five blocks, or layers, which must be assumed to comprise conjunct tetrachords, say A – d, d – g, g – c′, c′ – f′, f′ – b♭′. The bottom note of each, and the top note of the highest, is termed *rast* , and they accordingly form a series of fourths, readily relatable to the standard tuning of the (now five) strings of the lute, spanning just over two octaves. The total range divides into two registers (*sā z*), and also into consonant (*mulā ’im*) *aṣ wā t* (here used generically in the sense ‘modes’), for which the conventional names known to contemporary musicians will, we are told, be given below. Exactly what the term *sā z* designates is not vouchsafed, and although the obvious presumption that it approximates to the concept of the octave proves to be correct according to Ibn Kurr, it transpires that for musicians it relates, rather, to a (double) heptachord. It should in any case be emphasized, in marked contrast to the Systematists, that the octave as such is an irrelevance for Ibn Kurr: he never uses the Systematist term for octave, *ḏū al-kull* (nor, for that matter, the Systematist terms for tetrachord or pentachord), and the recognition of the octave indicated by *sāz* is no more than fleeting: it is nowhere employed as a structural concept and is never alluded to in the descriptions of the modes. [24]

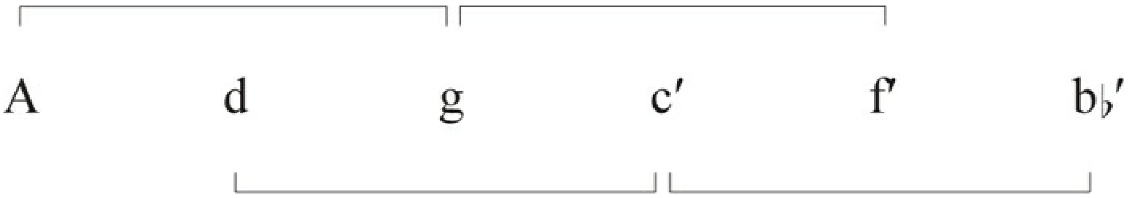
The structural, tetrachord-framing importance of the *rast* notes is then made explicit in the statement that they provide the limits (*ḥudūd*) that demarcate (*ḍabaṭ*) the gamut. This is followed by a syntactically awkward extension to include the intermediate notes that establish the internal disposition of a segment (*ḍabṭ an li-mīzān al-qisma*) [25] – with *qisma* being by implication the nearest Ibn Kurr comes to a term for tetrachord – and specify (*'arraf*) pitch levels (*kayfiyyat al-ṣawt*) from low

fol. 26r

to high throughout the gamut.

For the *ramal* note, however, there is a further important qualification: it divides (*fāṣila bayn*) the *anġām*. This suggests that it was perceived to be a significant modal marker, but the reason given does not immediately reveal how: literally translated, it is that in most songs or modes (*aṣwāt*) [26] it is not used when what is above and below it in pitch is used (with, it may be assumed, the corollary that the other notes are so used, thus setting *ramal* in a category apart). But since everything above and below cannot be excluded, leaving *ramal* as the only note, one possible conclusion that suggests itself is that *ramal* would not co-occur with the two immediately adjacent notes (*dūkāh* and *rast*). If this meant one or the other (although the grammar implies both) the inclusion of *ramal* would entail a straightforward substitution leading to a change of mode, say *rast* 1 *ramal sākāh rast* 2 in place of *rast* 1 *dūkāh sākāh rast* 2, a contrast incidentally reminiscent of earlier processes of modulation through the substitution of *mujannab* notes, [27] or even, at a further remove, of the mutual incompatibility of the middle and ring-finger notes in early Abbasid modal theory. [28] The only problem is that it appears not to fit the facts as represented by the individual mode descriptions: in several cases Ibn Kurr includes *ramal* not in place of either *rast* or *dūkāh* (and certainly not in place of both) but in addition to them, and although it would be perfectly possible for it not to be immediately juxtaposed to either in a composition he makes no reference to such a technique. As a result, the more likely meaning is that, again in contrast to the behaviour of the *rast, dūkāh* and *sākāh* notes, a *ramal* note would not generally co-occur with the *ramal* notes in the flanking tetrachords. This accords well with the distribution found in the corpus recorded by Ibn Kurr, for in none of the 20-odd modes in which *ramal* notes are present do the central pair – those between *rast* 3 (= g) and *dūkāh* 4 – co-occur, and there are just two examples of the upper one of this pair being combined with the *ramal* note above. [29]

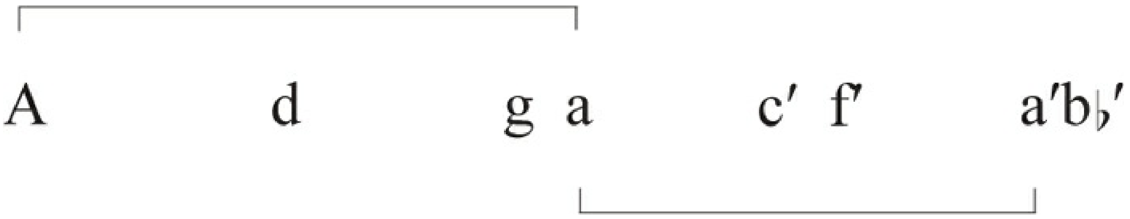
There follows a definition of *sāz* that Ibn Kurr attributes to practising musicians (*mūsīqāriyyūn*), according to whom *rast* 1 (= A), the lowest note, *rast* 3 (= g), the ninth note, and *rast* 5 (= f′), the seventeenth, cover one *sāz*. Similarly, *rast* 2 (= d), the fifth note, *rast* 4 (= c′), the thirteenth, and *rast* 6 (= b♭′), the twenty-first and final note, also cover one *sāz*, i.e.:



We thus have two overlapping systems, each consisting of two pairs of conjunct tetrachords, and one might speculate that this is a distant descendant of the earlier incorporation of the Greek Greater Perfect System as a theoretical framework, [30] with the omission from each octave of the disjunctive whole tone resulting from an adjustment to fit the practical logic of the lute tuning in fourths throughout. However, for Ibn Kurr the above is erroneous, and there now follows an account of what he considers to be

fol. 26v

the true (*ṣaḥīḥ*) state of affairs. It begins with a straightforward definition: from the gamut (*ṭabaqa*) there is divided off (*inqasam*) one *sāz*, from the first note to the eleventh. The eleventh note is *dūkāh* 3, and assuming this to be a whole tone above *rast* 3 = g we have an octave, A – a. Missing, though, is a parallel formulation about a second octave, and it is probable that the omission is intentional. However, the following remark does reveal a textual inconsistency, for although only two notes have been mentioned, it is to the effect that, with the high and low (notes) they contain, 'these three notes form one *sāz*'. The reference to three notes might thus be thought to suggest the original inclusion of a second octave beginning on *dūkāh* 3:



But in that case the third note, a′, could only be approximated to, among those listed, by *sākāh* 5, which almost certainly corresponded to a slightly lower pitch, and there is the further textual difficulty of the explicit 'one *sāz*' rather than two. As it is equally unlikely that the reference to three notes is a mistake for two, [31] a more probable supposition is that what was omitted was a reference to a third note within the one octave, *rast* 2, for example, which would provide an internal tetrachord + pentachord division. Congruent with this conclusion is that the main point here was to correct the mistaken assumption of practising musicians that the term *sāz* corresponded to (two sets of) two conjunct tetrachords rather than to an octave, and for this there is no need to include a second octave. Later, however, during the discussion of the individual modes (*fol. 38b*), there is what appears to be an acceptance of the validity of the heptachord division, for the relationship between d and b♭′ is couched in terms of a double *jawāb* ('response', a term discussed below), that is, the *jawāb* of d is c′, and the *jawāb* of c′ is b♭′.

We are then offered a practical example to illustrate how to segment the gamut and gain knowledge of the lower and upper boundaries (*ṭaraf*) of these divisions and of the intermediate notes that, as before, establish the internal disposition of the segment (*al-ḍābiṭa li-mīzān al-qisma*). We are instructed to begin from *rast* 1, and Ibn Kurr underlines the prominence of this note through the need to accord it extra duration (*ij'al lahā zamanan*) by comparison with the other notes, which are 'without duration' (*bi-ġayr zaman*), by which is meant without extra duration, so that they fall within the normal bounds previously set, whereas the *rast* notes may exceed them. He then spells out an ascending progression: *ramal* is to be omitted, so that *rast* is followed by *dūkāh, sākāh* and *rast* 2, which is

fol. 27r

also to be prolonged. The progression is then reversed, descending from *rast* 2 to *rast* 1,[32] again to be prolonged, followed by a final repetition of the upper *rast* 2, also to be prolonged. This, we are told, is a satisfactory segment (*ḥadd jayyid*) divided off (*maqsūm*) from the gamut. The whole process, from a *rast* note to the *rast* above, is then to be repeated in each of the other four tetrachords.

From this, he informs us, we may learn the segment boundaries of the gamut (*ḥudūd al-ṭabaqa*) and the notes contained therein – save for *ramal*, which still receives no mention. The penultimate remark again combines the vertical and horizontal axes by referring once more to the familiar temporal parallel: the segments are comprised (*inḥaṣar*) of notes

fols 27v–28r

just as the rhythmic cycles are comprised of *rāḥāt*. The terse final remark states that the *aṣwāt* are divided off (*inqasam*), i.e. formed, from it – assuming that *ṭabaqa* is the antecedent.[33] This would appear to be a straightforward reference to modes, except that Ibn Kurr appends the phrase 'and other things' (*wa-ġayruhā*), and in relation to modes it is difficult to think what these might be. Assuming the phrase not to be a mere thoughtless twirl of the order of 'and so forth', it might rather signal, if *aṣwāt* is understood here rather as (pre-composed) melodies, an awareness of the existence alongside them of improvised material.

There follows a list, arrayed vertically, from the topmost (*'ulwī ḥādd*) to the lowest (*suflī layyin*), of all the notes. The *ramal* notes are now included, and by analogy with the temporal indication of the prominence of the *rast* notes the word *rast* is each time elongated horizontally, while the temporal aspect is again stressed in the following remarks,

fol. 28v

which begin by stating that *rast* is a stable prolonged sound at a given pitch (*ṣawt lābiṯ maddād bimā fīh min al-ḥidda wa-'l-ṯiql*), the phraseology being this time immediately reminiscent of al-Urmawī's definition of a note, which begins in exactly the same way: it is a sound that lasts for a given duration at a given pitch level (*ṣawt lābiṯ zamānan mā 'alā ḥadd mā min al-ḥidda wa-'l-ṯiql*).[34] But if the overlap here is clear, there are no signs of familiarity with the *kitāb al-adwār* elsewhere, which suggests that the transmission is likely to have been indirect, if not indeed from an ulterior source on which al-Urmawī had also drawn.

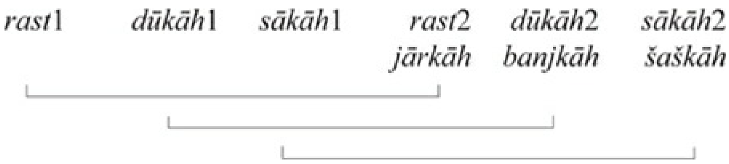
This definition is then glossed, elaborating on the criterion of duration, in a variant of a preceding definition of a *naġma* that rather vaguely allows a *rast* note a greater duration. It is an utterance (*nuṭq*) of the duration of two letters or more, or one extended (*mamdūd*) to the value of two or more, or the equivalent (*mā ḥākā ḏālik*), and is therefore called 'the extended sound' (*al-ṣawt al-maddād*).

There follows a series of brief definitions introducing further discriminations, terms and note-names, the first, rather obscurely expressed, concerning function:

- each note may in itself (*bi-ḏātihā*) be a *rast*, being distinguished by its transfer (*intiqāluhā*) to others;
- each *rast* is a corresponding note (*jawāb*) to another *rast*;
- each *rast* is *jārkāh* in relation to the *rast* below;
- each *dūkāh* above a *rast* is *banjkāh* in relation to the second *rast* below;
- each *sākāh* above a *rast* is *šaškāh* in relation to the second *rast* below;
- every third *rast* above a *rast* is a fourth *rast*.

The final remark, meaning simply that the third *rast* above e.g. *rast* 2 is *rast* 5, is trivial, but the others inject significant new elements. In the first, the proposition that any note may be a *rast* could be understood to relate to the varying positions of the prominent notes in different modes, but the notion of transfer suggests that the reference is rather to the substitution of roles (e.g. *dūkāh* functioning as *rast*) that characterizes Ibn Kurr's technique for describing transposition, even if the word *intiqāl* is not used in this context.

Of the new terms that are then introduced, it may be noted that the first, *jawāb* ('response','reply'), is the standard modern term for 'octave', and although Ibn Kurr's use of it is analogous in that it indicates a point at which material (the series of notes relating to the fingering on each string) begins to repeat, it corresponds here, as has been seen, to the heptachord, and may even be meant to include repetition at the fourth.[35] We have already seen that the series of pitches includes two notes called *dūkāh* (< Persian *dūgāh* 'position two') and *sākāh* (< Persian *segāh* 'position three'), clear indications, despite Ibn Kurr's consistently negative reactions to Persian views, that Persian names for various fret/finger positions were by now firmly embedded in Egyptian terminology, and the point is driven home by the addition here of three further such terms, *jārkāh* (< Persian *čahārgāh* 'position four'), *banjkāh* (< Persian *panjgāh* 'position five'), and *šaškāh* (< Persian *šašgāh* 'position six').[36] Their appearance here provides evidence not matched in the early Systematist literature for the ubiquity of the Persian denominations of the pitches defining what was evidently viewed as the most important scale, that of the mode the Systematists call *rāst*: al-Urmawī makes no mention of them, and even Šīrāzī, writing in Persian, only cites the degrees from *dūgāh* to *panjgāh*. They serve to confirm the equivalence established between the successive *rast* notes and extend the series of fourths further:



5.3 Intervals

Nothing is said about the intervals involved, and although it would be possible to continue to track Ibn Kurr's exposition by following his method of simply naming notes, it makes sense at this stage, prior to considering his exposition of the individual modes, to try to define a little more precisely what the intervallic relationships between the notes may have been. As Ibn Kurr himself offers us no direct help in this regard, whatever further information is brought to bear must, perforce, come from elsewhere, and specifically from Systematist theorists.

The scale theory formulated by al-Urmawī [37] proposes a Pythagorean tetrachord made up, in one disposition, of whole tone + whole tone + limma, and each (9 : 8) whole tone is divided into limma + limma + comma. Within the (4 : 3) perfect fourth (498 cents) delimiting the tetrachord, then, there is a Pythagorean major third consisting of two whole tones (408 cents) and another a comma smaller consisting of whole tone + two limmas (384 cents), approximating to the Just Intonation (5 : 4) major third, and it has been argued that this second value is a theoretical adjustment, representing what in practice was a neutral third, [38] as distinct from a major third, represented by the Pythagorean value, that might have varied in performance between this and the Just Intonation equivalent, thereby arriving at an approximation to contemporary norms of intonation. If we accept that such was the case, and take account of the use of the names *dūgāh* and *segāh* by Šīrāzī, which he attaches to the fifth and sixth steps of the scale of the mode *rāst*, [39] we arrive straightforwardly, for Ibn Kurr's *rast* 1 + *dūkāh* + *sākāh* + *rast* 2, at a tetrachord with a whole tone followed by two neutral intervals above. Using - to indicate a lowering by approximately a quartertone (and + to indicate a raising by approximately a quartertone), this tetrachord may be symbolized as /1 2 3- 4/.

If we then turn to Ibn Kurr's introductory ascending–descending progression through the various tetrachords, and represent the prominent *rast* notes with void note heads, we have: [40]

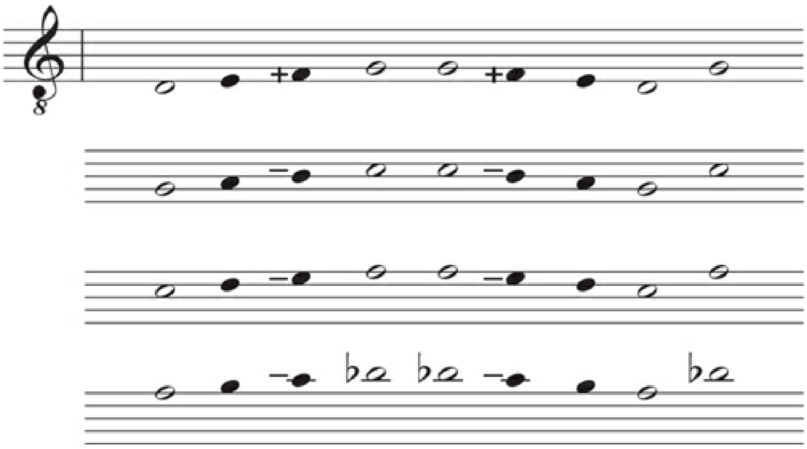


Figure 5.1 Progressions

This evidently establishes the primacy of what Systematist theory would term the *rāst* tetrachord. Ibn Kurr proceeds no further, but from this, starting on the successive *dūkāh* and *sākāh* degrees, we could readily arrive at a primary set, which may be termed zalzalian, [41] of tetrachords containing a whole tone and two neutral intervals:

/1 2 3- 4/
/1 2- 3♭ 4/
/1 2- 3- 4/

In addition, one might have anticipated, by analogy with Systematist theory, the inclusion of a further note or notes (3 and/or 3♭) to allow the production of a parallel diatonic tetrachord that could then be similarly rotated:

/1 2 3- 4/
/1 2- 3♭ 4/
/1 2♭ 3♭ 4/

However, the first additional entity we encounter, included indeed within the display of the primary set of pitches, is that termed *ramal*, placed neither above 3- nor below it but, quite unexpectedly, between 1 (*rast*) and 2 (*dūkāh*), potentially, therefore, corresponding to one (or more) of 1+, 1# /2♭, [42] and 2-. There is no mention of *ramal* in Systematist theory in relation to pitch, [43] however, and while the name suggests a possible link with North African practice, its current Mahgribi use to designate an open string on the *ʿūd* (tuned a fifth above the lowest) [44] is clearly unrelated and of no help, while its survival there as a mode name is equally irrelevant, for all that it is also so used by both Ibn Kurr and his Cairo contemporary, al-ʿUmarī.[45] Appealing, then, to general considerations first, it would appear that of the three possible values the first and lowest is the least likely, both because it would do no more than allow the zalzalian set to be reproduced a tone higher and, more importantly, assuming we are dealing with a lute-based organization of tonal resources, because one would hardly have anticipated as the first additional value a quarter-tone, rather than a semitone or three-quarter tone, from the open string.

What confirms this conclusion is the position of a further entity, not mentioned in the exposition, that appears in ensuing mode descriptions: the 'half' (*niṣf*) note[46] – in contrast with which the others are on one occasion termed 'whole' (*kāmil*). The half note is placed beneath the corresponding whole one, and the fact that there is a half note beneath *ramal* (and above *rast*) makes it clear that the value 1+ for *ramal* may be excluded.

However, a case could be made for each of the other possible values. Considering the Systematist accounts, both 2♭ and 2-, together with corresponding half notes (presumably 1+ and 2♭ respectively), would allow, according to al-Urmawī's presentation of structural elements,[47] the production of the diatonic tetrachords, their related pentachords (such as /1 2 3- 4 4# 5/), and the structures that are additional to the zalzalian tetrachords (such as /1 2- 3♭ 3-/). Accordingly, as there is no half *dūkāh*, we would arrive at the following possibilities for the tetrachord, with two sets of pitches within the first whole tone. The resulting semitone and quartertone steps are not to be thought of as fixed in size: they constitute a set of phonemic distinctions the phonetic realization of which must be expected to fluctuate according to context:

	1+ half *ramal*	2♭ *ramal*						
1 *rast*				2 *dūkāh*	3♭ half *sākāh*	3- *sākāh*	3 half *rast*	4 *rast*
		2♭ half *ramal*	2- *ramal*					

The upper option, however, differs from the interpretation given above of the Systematist tetrachord, which has /1 2♭ 2- 2/ in both whole tones, making it harder not to prefer the lower, where the 2- value for *ramal* would yield a perfect match. But before simply discarding the alternative value there are other factors to consider. Returning to Ibn Kurr, we may note, first, a worrying asymmetry with regard to the 2- value for *ramal* when compared with *sākāh*, its counterpart in the second whole tone, for although a 'full' note and included in the exposition of the basic pitch set, there is no place for it in an expository outline comparable to that given in Figure 5.1; moreover, as we have seen, Ibn Kurr discusses it in a way that implies that it is of lesser importance than the others, or at least has a different status. A further difference is that in some mode descriptions, indeed in several, *rast, ramal* and *dūkāh* are juxtaposed whereas *dūkāh, sākāh* and half *rast* are not, which might be thought to strengthen somewhat the case for /1 1# 2/ over /1 2- 2/, although it must be conceded that without further supporting evidence the basis for this preference is ultimately little more than assumption.

It might be thought that a promising source for such evidence could be Šīrāzī's comments on modal overlaps, but in the event they fail to give a decisive answer. He states that with the addition of a pitch (*x*) that can reasonably be regarded as corresponding to Ibn Kurr's *ramal*, the mode *dūgāh* becomes *iṣfahān*, and likewise *segāh* gives the impression (*muʿṭī-yi ṣūrat*) of *iṣfahānak*.[48] We have, as a result, the following equivalences:

dūgāh	(1)	2	3-	4	*x*	5	
iṣfahān		1	2-	3♭	3	4	
segāh		1	2	3-	4	*x*	5
iṣfahānak	1	2-	3-	4	5-	6♭	6-

Thus the former points to /4 4# 5/ = /1 1# 2/, the latter to /4 5- 5/ = /1 2- 2/, although it could be argued that the clear equation of the former provides the more compelling evidence, since in the second case the wording could be interpreted as encompassing also some degree of approximation, so that in the form /1 2 3- 4 4# 5/ *segāh* might still be sufficiently similar to create the impression of *iṣfahānak*.

For material within the *ġāyat al-maṭlūb* itself that might shed further light on the matter we may begin by scrutinizing, within the descriptions of individual modes, those contexts that again allow us to make comparisons with securer Systematist definitions, considering, first, half *ramal*, which has had assigned to it the value 1+ in relation to the lower value for *ramal*, 1#, and 1# in relation to the higher, 2-. Much the rarer of the two, it occurs in fact only twice, first in 5.8.2 *zīlakand*, which may be compared with the Systematist equivalent, *zīrafkand*:[49]

Ibn Kurr	*zīlakand*	/2	3-	4	half *ramal*/
al-Urmawī	*zīrafkand*	/1	2-	3♭	3-/

This again points towards the lower value, here 4+, which provides an exact correspondence with the Systematist definition. Its second occurrence unfortunately adds nothing further, since it is in 5.10.2 *šahnāz*, clearly regarded as derived from *zīlakand*, and using the same notes.

On the other hand, we are told that *šahnāz* is sometimes reduplicated, and here the description sheds light on the value of *ramal*. Exactly the same form of reduplication appears in the version of *šahnāz* offered by Šīrāzī, the basic /1 2- 3♭ 3-/ element of *zīrafkand* being repeated above.[50] But instead of beginning (in ascent) from 2 and therefore requiring the use of half *ramal* (4+), Ibn Kurr begins his reduplicated form (in descent) from 5, going first to 3-, and then from 3- to 1, which requires the inclusion in both cases not of half *ramal* but of *ramal*. This gives the following correspondences with Šīrāzī's version:

Ibn Kurr	/5	*ramal*	4	3-	3♭	*ramal*	1/
Šīrāzī	/5	5-	4	3-	3♭	2-	1/

and clearly points to the higher value for *ramal*. On the basis of this evidence we arrive at a division of the first whole tone that is neither of those proposed above, but rather /1 1+ 2- 2/.

However, reference to 5.8.3 *iṣbahān* suggests a different conclusion. According to Ibn Kurr's description it uses a set of pitches that corresponds precisely to that defined by Šīrāzī:[51]

Ibn Kurr	g	a	b-	c′	*ramal*	d′
Šīrāzī	g	a	b-	c′	c♯′	d′

and in the latter the c#′ value is secure, as Šīrāzī gives ratios confirming that this pentachord consists of a whole tone below the *iṣfahān* tetrachord notated (and again with the value 3 confirmed by the ratios, which approximate to equal intervals) as /1 2- 3♭ 3 4/, a clear indication, then, that in this case *ramal* should have the lower value. Similarly, if we compare Ibn Kurr's description of 5.9.3 *rahāwī*[52] with the Systematist equivalent we have:

Ibn Kurr	/4	3-	2	*ramal*/
al-Urmawī	/3	3♭	2-	1/

For al-Urmawī (and Šīrāzī) the three intervals are again defined by ratios as virtually equal in size, thus pointing again emphatically to the lower value for *ramal*. We thus appear to have, albeit on the basis of only one example, a single result for half *ramal*, 1+, while the examples for *ramal* yield different values.

5.3.1 Transposition

In the search for further evidence, this time wholly internal to the *ġāyat al-maṭlūb*, we may turn to transposition. Although the manner of presentation involves certain difficulties, lengthy discussion of interpretative problems may be avoided by focusing on one particular issue, transposition up or down a whole tone. Such is the case in the exposition of 5.10.3 *salmak*, where we have a transposition up a whole tone, and the *ramal* of the original becomes *sākāh*, the equivalences being:

original	c′	*ramal*	c′	*ramal*	c′	f′	d′	*ramal*	c′
transposed	d′	e-′	d′	e-′	d′	g′	e′	e-′	d′

thus reverting to the higher value, 2-. To take a rather different example, in Ibn Kurr's presentation of 5.8.4.1 *ḥiṣār al-zīlakand*, the mode *sākāh*, defined as /1 2 3-/, is transposed so as to begin from *ramal*. Again, if this has the value 2- the same intervals can be reproduced exactly, the result being /2- 3- 4/, while if it has the value 1#/2♭ the second interval cannot: there is a half *sākāh*, presumably 3♭, but no 3+. This yields, therefore, the same result as *šahnāz* and *salmak*.

However, it is based upon the assumption that when transposing Ibn Kurr provides exact correspondences, which, it transpires, is by no means the case. In his exposition of the transposition of *sākāh* to *ramal* in *ḥiṣār al-zīlakand*, for example, he includes (gratuitously) an intermediate pitch, so that we have:

original	1	*ramal*	2	3-
transposed	*ramal*	2	3-	4

Thus if *ramal* = 2- the first two intervals fail to correspond (although the span remains a neutral third), while if *ramal* = 1#/2♭ the second interval fails to correspond (and the span is increased). Similar discrepancies occur elsewhere, while with 5.13 *haftkāh* we have a transposition that demonstrated clearly that the logic he follows is, rather, a simple one-to-one matching of successive steps, with half notes excluded, irrespective of the size of the intervals involved. It may be represented as:

first series	4	3-	2	[3-	4]	*ramal*	5
second series	5	*ramal*	4	[*ramal*	5]	6-	7♭

We thus have an initial descent in which a minor third in the first series (4 to 2) corresponds to a whole tone in the second (5 to 4), and a final ascent in which a whole tone in the first (4 to 5) corresponds to a minor third in the second (5 to 7♭). If anything, the value 1#/2♭ for *ramal* might seem more appropriate in this case, but the safest conclusion, given that the evidence reviewed here provides persuasive support for both the higher and the lower values, is to accept that *ramal* was a contextually determined variable. Accordingly, rather than have to decide, sometimes arbitrarily, which value to assign to it on a case-by-case basis, we may follow Ibn Kurr in subsuming both under one sign, and symbolize *ramal* with = (so that we have 2= or 5=).

5.4 Hierarchies

Scattered through the remainder of the second *muqaddima* are negative comments on how Persians perceive the derivational relationships between modes and hence group them, but in addition to rejecting the views of others Ibn Kurr himself provides labels that differentiate them and assign them to different classes, and he organizes his account accordingly. Thus before examining his descriptions of the individual modes we may draw this material together and consider his categorization of the corpus, comparing it with that current in the Systematist tradition. An immediate and striking difference between them is that although a certain hierarchy may be discerned in the way he orders his presentation, it is not one within which precedence is given to the familiar set of 12 (the *parda* or *šadd* modes), followed by a secondary set of six (the *āwāz* modes). This may not seem particularly unusual when set against Šīrāzī’s treatment, which likewise pays scant attention to these categories, and indeed proposes others, but within the Systematist tradition Šīrāzī’s approach is exceptional, and that the two sets were widely accepted as the fundamental articulation of the most significant elements of the modal corpus is demonstrated by the importance that is also attached to them in other non-Systematist texts, both Arabic and Persian.

5.4.1 The šadd/parda *modes*

This, the most important group, seems to have emerged through a process of accretion traceable in part in Persian texts of the eleventh and twelfth centuries,[53] where they are referred to as *parda*. By the end of the twelfth century, if not before, they had grown, or coalesced, into a set of 12, a number no doubt determined, or at least influenced, and certainly later maintained, by cosmological considerations. In Persian texts they continue to be known as the *parda* modes, while al-Urmawī uses the Arabic term *šadd* (pl. *šudūd*). The various lists identifying the membership of this set that we encounter in texts of the early thirteenth century all begin with *rāst*,[54] followed in some cases by *‘irāq, iṣfahān*, and *zīrafkand*, and in some later accounts it is from this nucleus of four that the remainder of the set is held to be derived.[55] Separating them off in this way, and thereby according them particular significance, contrasts markedly with what would become the orthodox Systematist version, that first proposed in the final version of the *kitāb al-adwār*, where *rāst* is displaced from its position at the head of the set, there is no such derivational hierarchy, and the internal groupings are different. The older or, better, traditional view survives in the *ġāyat al-maṭlūb*, but that it is not an archaic feature peculiar to it is demonstrated by its presence in the verse text contemporary with it, the *urjūzat al-anġām* by al-Irbilī, which relates the nuclear group of four to the fourfold humours and elements. The new Systematist orthodoxy, in short, never fully prevailed, and the alignment of modes with various phenomena grouped in the sets of four (*murabba‘āt*) previously developed at length by al-Kindī[56] and the Iḫwān al-Ṣafā’[57] was to remain as one element of a perennial cosmology of music that would, indeed, eventually resurface in one of the last major Systematist texts, the *risāla al-fatḥiyya* of al-Lāḏiqī.[58]

5.4.2 The hank *modes (1)*

Surprisingly, perhaps, neither *parda* nor *šadd* finds a place in Ibn Kurr’s terminology, even if he does agree with the primacy accorded, within the set, to the nuclear four. The order of events is, however, rather quirky, for although two of them are among the very first to be introduced, it is only later that he presents a modal scheme in which they are given pride of place as, in effect, a self-contained group. He links them conceptually by relating them to or perhaps, rather, considering them different manifestations of, a primary modal nexus the principal representative of which, termed ‘head melody’ (*ra’s al-hank*), is, in effect, the counterpart of the Systematist *rāst* (for Ibn Kurr the term *rast* relates only to notes: it is never mentioned as a mode name).[59] But despite its evident importance, *ra’s al-hank* does not have a section devoted specifically to it: it is dealt with episodically, and when it is first introduced by name it is not discussed as a separate item but is placed in the environment of other modes, almost as a primary constituent of an entity of which others also partake. Nor does Ibn Kurr continue directly with a presentation of the remaining three: it is only after dealing with a different set of modes that he reverts to what for the Systematists is the *parda/šadd* group, continuing with *‘irāq, zīlakand* and *iṣbahān*, discussion of the modal characteristics of the nuclear four considered as a group being held back until the section on *iṣbahān* (5.8.3).

Ibn Kurr then proceeds to present, one after another, the remaining eight, but he does not appear to consider them a consolidated group belonging to the same modal class: the headings for the first four contain the term *hank*, reminiscent of *ra’s al-hank*, while those for the remainder do not, and three of them are actually given a different class designation. Confirmation of an eight (= 4 + 4) *hank* vs four non-*hank* division is given when, having completed his survey of the eight *hank* modes, he states (*fol. 39a*) that they are the ones that the ancient Byzantines[60] considered the basic modes (*ummahāt*). They consist of two circles (*dā’ira*) of four *hank* each, the first containing the nuclear group, *ra’s al-hank, ‘irāq, zīlakand*[61] and *iṣbahān*, and the second *māyāh, abū salīk, nawā* and *uššāq*, and Ibn Kurr draws a distinction between them based on relative pitch, referring to the low register (*līn*) of *ra’s al-hank*, the first mode in the first circle, and the high register (*ḥidda*) of *māyāh*, the first mode in the second circle. Having so robustly dismissed Persian views, it is interesting to find him appealing here to a different foreign connection, one that is, indeed, rendered specific: these modes have, he says, Greek (*rūmī*) names, which are then listed. In the following transliteration no attempt is made to supply short vowels not indicated in the original, and the symbol ø is used for a letter shape devoid of the dots that would identify it as either *b, t, ṯ, n* or *y*:

’bzwṭs	*dqn’rs*	*brøṭws*	*t’tirṭws*
bl’nbrwnw’	*bl’n dqt’rw’*	*y’rys*	*øl’n ttrtw’*

However garbled, these do actually correspond to the Byzantine mode names:[62] βαρύ ς, ‘low’, is readily recognizable from *y’rys*, and τέ ταρτος, ‘fourth’, from *t’tirṭs*, and having made these connections it is possible to choose appropriately between the different values for the three Arabic letters transliterated above as *’, w*, and *y* (*’* and *ā, w* and *ū*, and *y* and *ī* respectively), identify various scribal misreadings, and reconstitute recognizable versions, first of the authentic series:

ā brūṭus[63]	*diftārus*[64]	*trīṭūs*[65]	*tātirṭūs*
(?ὁ) πρῶτος	δεύτερος	τρίτος	τέταρτος
(first)	(second)	(third)	(fourth)

and then of the plagal:

blāy brūtū'[66]	*blāy diftārū'*
πλάγιος (του) πρῶτου	πλάγιος (του) δεύτερου
b'rys	*blāy titartū'*
βαρύς	πλάγιος (του) τέταρτου

It has been postulated that the modal codification of early Abbasid court music practice attributed to Isḥāq al-Mawṣilī (d. 850), with its two contrastive sets of four modes each, may well have been derived conceptually, even if the criterion of discrimination is different, from the model of the already established Byzantine *oktoechos* ,[67] but despite the fact that later Abbasid theorists occasionally refer to the Greek designations of the pitches within the Greek Greater Perfect System they do not cite Byzantine modal terminology. It is thus both surprising and interesting to find it surfacing in a source as late as the *ġāyat al-maṭlūb* , and one might even wish to detect a reflex of the authentic-plagal distinction in the registral contrast Ibn Kurr draws between the two sets. The contemporary evidence of al-ʻUmarī suggests that the older eightfold nomenclature, the *aṣābiʻ* , had only recently been supplanted in Egypt, and it is clear from the first samples of notation in the *kitāb al-adwār* that, even if moribund, it was still alive in memory for al-Urmawī , but neither makes any reference to an external source or connection. However, although Ibn Kurr might well have had some familiarity with Coptic chant, there is no reason to think that we are dealing here with anything more substantial than a distorted textual reference taken from an unknown source. The question, rather, is why this list should have been cited at all, and as it is not used as part of the argument seeking to demolish Persian views it is perhaps best considered, being placed in a vague but certainly distant past, as an unexpected (and anachronistic) reflection of the respect in which ancient Greek scientific and musical learning was held: it is noteworthy that Ibn Kurr ascribes them to the 'ancient' (*mutaqaddimūn*) *rūm* . As for the conceptualization of these modes as somehow represented by, or distributed around, two circles, there is no reason to think that it is borrowed from the use of the circular format in al-Urmawī 's treatises, where it serves quite different purposes:[68] if anything, one might look for a common source in the prosodic theory of al-Ḫalīl ibn Aḥmad.

There is, significantly, no mention of a third cycle around which the remaining four *šadd* modes might be placed, but they are certainly the next to be defined. This, it could be claimed, is at least a tacit recognition that they belong together, yet Ibn Kurr certainly does not expressly associate them with the others as members of the same set. Rather, he admits knowledge of the concept only by denying it, for he says that the remaining four are being mentioned in order to demonstrate the falsity of the Persian view that four modes (that is, the nuclear *ra's al-hank, ʻirāq, zīlakand* and *iṣbahān* group) have generated (*antaj*) eight.

5.4.3 The āwāz modes

The resulting sum of 12 is also implied in the following, equally negative, remark rejecting as inconceivable (*laysa bi-mutaṣawwar*) the Persian view that there are six modes each one of which is derived (*far'*) from two, referring, clearly, to the kind of derivational scheme recognized by al-Irbilī , in which six pairs of *šadd* modes are the source for a further six modes. These constitute the second group recognized in Systematist and other texts, the *āwāz* modes, and this time Ibn Kurr acknowledges the term,[69] but only as one used by Persians: in the chapter heading introducing them he speaks generically of 'note combinations' (*tarkīb al-naġamāt*), and tellingly avoids adding any class term to their individual headings.

Membership of the set was in any case not unanimously agreed. According to Ibn Kurr it consisted of *nayrūz* ,[70] *šahnāz, salmak, kawašt* ,[71] *zirkašī* and *ḥijāzī*, but he recognizes that some people included *kardāniyā*[72] in place of *zirkašī*, while al-Urmawī 's account also included a further substitution, *ḥijāzī* being replaced by *māyāh* . The set of six *āwāz* modes thus coheres later, and if we compare the earliest accounts, those of al-Urmawī and Nīšābūrī , we find virtually no agreement beyond the number involved. The latter does include two of those recognized by Ibn Kurr, *zīrkaš* and *ḥijāzī*, but given that he also uses the term *šuʻba* rather than *āwāz* we may think, rather, of distinct if partially overlapping groups rather than of variants of a single group, and in either case of regionally differentiated ways of organizing the mode stock. In support of this conclusion one might also cite Šīrāzī 's failure to mention an *āvāz* category while identifying a group (albeit of nine modes) labelled *šuʻba* . The next significant Persian text, the mid fourteenth-century *nafāʼis al-funūn* by Āmulī ,[73] distinguishes four categories, *parda, āvāz, tarkīb* and *šuʻba* , thus suggesting a conjoining of these different approaches, but while the *šuʻba* modes cited are the nine identified by Šīrāzī , it mentions *muḥayyir* and *iṣfahānak* as *āvāz* , thus suggesting that the regularization of the membership of this category in the Persianate world was perhaps still not wholly secure. Likewise, as the common thread that links and begins Ibn Kurr's individual accounts of the six is the negative one of his ideological rejection of the 'Persian' derivational scheme giving rise to them, it cannot necessarily be concluded simply from his juxtaposition of them that they were generally considered by Cairo musicians as a set. Yet the very vehemence of his rejection suggests that such perceptions were indeed current in the Arab world, and for further evidence that this was so we may again turn to his contemporary al-Irbilī , who recognizes the existence of the *āwāz* set, agrees with Ibn Kurr as to its population, and claims the they are derived in exactly the way that Ibn Kurr objects to, even if the putative parent modes quoted are the same in only two cases. (For some, al-Irbilī actually gives alternative derivations, a further indication of a lack of consensus in this area.)

5.4.4 Other modes

It is clear that several more modes were in use than are contained within the *šadd/parda* and *āwāz* groups, but the number cited varies considerably from author to author. Just two are mentioned by al-Urmawī, their names, *muḫayyir ḥusaynī* and *nihuft al-ḥijāzī*, clearly indicating their derived status, but beyond them he alludes to the existence of 'combinations' (*tarkīb*) – that is, other combinations of pre-existing elements – and to the possibility of expert musicians being able to use dissonant (*mutanāfir*) octave scales. [74] These last, though, were evidently not recognized as normal parts of the modal repertoire, while equally marginal – because obsolescent – are the old *aṣābiʿ* terms, references to which surface, unexpectedly, among his examples of notation. But al-Urmawī had made no attempt to provide a full inventory of the modes in use, as is demonstrated by the extent to which his total is exceeded by that of Šīrāzī, whose more comprehensive account not only cites a considerable number of combinations, but also names, and describes, several further modes, including a group of nine, termed 'branch' modes (*šuʿba*), four of which are named after the progressively higher positions, within the *rāst* scale, of their most prominent notes: *dūgāh, segāh, čahārgāh* and *panjgāh*. These may be termed, for convenience, the 'number' modes.

The possibility of such further ramifications is also noted by al-Irbilī, [75] who identifies a few more mode names, and again refers to the creative potential of the process of combination. Three of the additional ones named are held to be derived from pairs of *āwāz* modes, in exactly the same way as the *āwāz* modes are held to be derived from pairs of *šadd* modes. Termed *šāz*, [76] this category consists of *ʿuzzāl* and *zāwilī*, both of which were known to Šīrāzī, and *ʿukbarī*, mentioned by neither Šīrāzī nor al-Urmawī. The other names included by al-Irbilī are *muḫayyir, mustaʿār, ramal, nahrī* and *ḫwārazmī*, only the first two of which are familiar from Systematist accounts. [77]

Thus between al-Urmawī, Šīrāzī and al-Irbilī the picture is one of broad agreement on what are perceived to be the constituents of the central area of the modal landscape, even if Šīrāzī has rather different logic-based priorities with regard to groupings and their labels. However, when it comes to the periphery explored by Šīrāzī and al-Irbilī there is a marked difference between the entities selected, and it may well be that here their respective accounts reflect a degree of regional variation. In addition, al-Irbilī differs somewhat from al-Urmawī in attaching considerable importance to an internal hierarchy within the *šadd* set, related to which is a particular articulation of derivational relationships, and both of these are conspicuously absent from Systematist accounts. The contrast becomes all the more significant when we take into consideration the fact that he was perfectly aware of al-Urmawī's [78] reordering of the *šadd* set to begin with *ʿuššāq* rather than *rāst*, his inclusion within it of *ḥijāzī* at the expense of *māyāh*, and likewise his substitution of *kardāniyā* for *zīrkašī* in the *āwāz* set; but despite this he clearly felt under no obligation to follow suit. [79]

Yet further differences emerge when we turn to consider both the range and the categories of the additional modes described by Ibn Kurr. With regard to the latter, the majority of the *šadd* modes, as has been noted, are classified by him as *hank*, but there are non-*šadd* modes that he describes in terms similar to those used for the first set of four *hank* modes and to which, logically, he applies the same term. Mentioned in the course of his discussion of *zankulā*, [80] they consist of *ʿukbarī, sāzkarī* and the marginal *ḥijāzī*. The inclusion here of *ḥijāzī*, the description of which comes later among the *āwāz* modes – or, more precisely, from Ibn Kurr's perspective, the modes the Persians call *āwāz* – could reasonably be seen as in alignment with al-Urmawī's reassignment of it to the *šadd* group, but that *hank* is still not quite equivalent to *šadd* is shown by its use as a label for the remaining two as well. Of these, one is also noted by al-Irbilī, while *sāzkarī* will appear in later accounts. [81]

An important general category term particular to the *ġāyat al-maṭlūb* is *ṣawt*, applied to three of the *šadd* modes, *buzurk, rahāwī* and *ḥusaynī* (and also used in relation to *ʿirāq*, otherwise classified as a *hank* mode). Its first appearance, though, is in association with the series of 'number' modes previously mentioned by Šīrāzī, which in Ibn Kurr's catalogue extends beyond *banjkāh* to include also *šaškāh* and *haftkāh*. Later in the *ġāyat al-maṭlūb* it is also applied to a further mode not mentioned by al-Urmawī, but recognized by al-Irbilī, *ramal*.

The other category terms employed by Ibn Kurr, none of which is defined, are *muwallad* (pl. *muwalladāt*), *šawāḏḏ* (pl. *šawāḏḏāt*) and *murakkab* (pl. *murakkabāt*). Each is indicative of a perceived form of relationship. The last may be equated with al-Urmawī's *tarkīb* class, and likewise points semantically to fresh combinations of existing elements, whereas the other two suggest, rather, derivational relationships, and Ibn Kurr specifically mentions *muwalladāt* derived respectively from *abū salīk* and *nawā*. No comparable example is given for the *šawāḏḏ* class, but it is to be identified with the *šāz* noted by al-Irbilī, who cites, among the examples of this class, *zāwilī*, a mode Ibn Kurr defines as a derivation from *sākāh*. However, in a final remark (*fol. 46v*), after his presentation of *zāwilī* and *mubarqaʿ*, neither of which is assigned to a particular class, Ibn Kurr yokes *šawāḏḏāt* and *murakkabāt* together, as if representing cognate categories. [82] But no names are given or structures cited: they are merely stated to be numerous, their combination (*tarkīb*) being evident (*ẓahara*) to those who know the divisions of the gamut (*qismat al-ṭabaqa*) and how modes are constructed (*min ayna maʾḫaḏ al-aṣwāt*). Ibn Kurr thereby echoes the indications given by others of the existence of an extensive range of further possibilities: implied, then, as with Šīrāzī's account, is a considerable degree of combinatorial freedom, but doubtless within recognized structural constraints relating to the appropriate sequencing of elements of the pre-existing mode stock. [83] Confirmation is provided by the particular case of *kardāniyā*, which is labelled both a *naġam murakkab* and a *tarkīb*, and is described as combining in succession elements of three other modes.

5.5 Individual modes: preliminaries

The above discussion has attempted to place Ibn Kurr's articulation of modal groupings within the context of earlier and contemporary accounts, Systematist and non-Systematist alike. In proceeding from the group to the individual it would be logical to continue in a similar comparative vein – as indeed was the case with the discussion of the individual rhythmic cycles – by setting his versions, mode by mode, alongside those presented by al-Urmawī and Šīrāzī, but given both the interpretative difficulties sometimes presented by the *ġāyat al-maṭlūb* and what frequently appears, at least initially, to be the radical nature of the differences between Ibn Kurr's accounts and those of the Systematist theorists, this would result in far too lengthy a treatment of each item. Accordingly, although the Systematist accounts are drawn upon insofar as they shed light upon problematic passages in Ibn Kurr's text, the attempt will be made to understand his versions as far as possible in their own terms first, with systematic comparisons being reserved for later. As with the previous discussion of rhythm, the presentation will not always be linear, but in addition to the desirability, as there, of grouping certain phenomena together, there is a more compelling reason for not following the text step by step, namely that within a section on a given mode Ibn Kurr sometimes makes references to others that have not yet been described.

Throughout his presentation Ibn Kurr continues to avoid any form of notational shorthand, another clear contrast with al-Urmawī . His definitions are for the most part verbal descriptions of the successive notes used, and are frequently clear despite being cumbersome; but, as might have been expected from his account of the rhythmic cycles, they occasionally appear, at least initially, obscure to the point of impenetrability, and there is the further complication that the state of the text is not always impeccable. Accordingly, the versions offered here are sometimes tentative, and even when interpretation leads to a clear outcome it cannot always be considered compelling. Nevertheless, more than enough may be securely established to demonstrate that Ibn Kurr's account of the modes provides an individual perspective, one that in certain respects is quite unexpected when compared with that of his Systematist counterparts.

Within the conventional frame of reference of the (now five-string) *'ū d* tuning, rendered here as A d g c′ f′, his descriptions sometimes give sufficient information to place the notes of a mode precisely. However, we are frequently presented with pitches that can be placed in relation to an open string, but not to a specific one. In such cases the pitch relationships may be indicated numerically, with the first *rast* to be cited (or implied) expressed as 1, and the notes *dū kā h* and *sā kā h* above as 2 and 3- respectively. In continuing upwards, the logic of Ibn Kurr's terminology would require notating the next *rast* and *dū kā h* as 1′ and 2′, but here the convention will be adopted of taking the octave, however unimportant it may have been in Ibn Kurr's scheme of things, as the point at which numbers repeat, so that the next *rast* and *dū kā h* will be referred to, instead, as 4 and 5 respectively. Similarly, the notes *sā kā h* and *dū kā h* below will be notated as 7 - and 6 (rather than 3 - and 2), so that adding the notes of the two strings adjacent to those of the string providing the primary reference we have:

5 6 7 - 1/1 2 3- 4/4 5 6-.7♭

When representing such cases in notation, the central g will be selected as the default position for the first *rast* mentioned (or implied), but an initial diamond note head will be used to indicate that this is arbitrary, and that the definition given may normally have been positioned elsewhere, or may at least have had the potential to be relocated to other strings.

5.6 *hank* modes (1)

The first section (*faṣ l*) to be devoted to a specific modal entity is preceded by a brief discussion in which others are outlined or cited. This continues the series of statements
fol. 28v
discussed in 5.2 (the last to be mentioned being the rather superfluous one to the effect that a third *rast* above a *rast* is a fourth *rast*), with the assertion that through the progression from every *rast* to the next *rast* above a mode (*naġ am*) called *zankulā* is fleshed out or given form (*taṣ awwar*); and that through the progression in the opposite direction a mode called *ra's al-hank* ('the head, i.e. principal, melody') is given form.

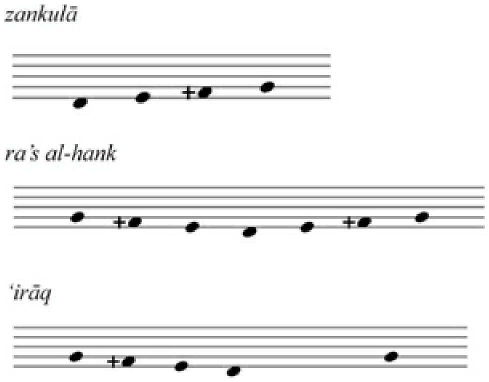
5.6.1 ra's al-hank

This is so called because, in a repeat of a previous formulation, it is the first
fol. 29r
of four delightful (*muṭ rib*) modes (*anġā m*) that ascend (*šā l*) from low to high and descend (*ḥ aṭ ṭ*) from high to low. We are then instructed, with a slightly bumpy syntactic repetition, that if we wish to give form to 'a principal melody' from a *rast* note, deriving from it a delightful mode called *'irā q* , we should begin from *rast* 3 = g, and proceed g f+ e d g. It is confirmed that these five notes are '*ra's al-hank* '; and that this mode (*ṣ awt*) does not include the *ramal* note between e and d.

If this whole account seems at first a little imprecise – except for the very precise outline given for *'irā q* – it begins to cohere if we accept that a distinction may be drawn between the generic use of the grammatically indefinite *ra's hank* to indicate a particularly important mode, perhaps specifically restricted to one of the conventional set of four nuclear modes, and the use of the grammatically definite *ra's al-hank* ('the head melody') to indicate just one particular mode. (It has to be conceded, though, that the five notes of *'irā q* are stated to be *ra's al-hank* , not *ra's hank* .) The references to the *ra's al-hank* mode that is not *'irā q* appear, though, contradictory: the initial distinction drawn between it and *zankulā* is clear in that the latter is ascending and the former descending; but the next statement would have it both ascending and descending. In other words, whereas the shape displayed for each tetrachord in Figure 5.1 is first divided between two modes, it is subsequently united under a single name, possibly, then, with the descent being understood as the characteristic extra that defines it as *ra's al-hank* after the ascent that is common to it and *zankulā* . In favour of such a reading could be cited the earlier reference to four modes that ascend and descend, but as one of them is *'irā q* , which begins with a descent, it may be concluded that the qualification is collective rather than valid for each, and means no more than that they traverse the territory in different directions. What could be interpreted as a further indication in favour of the ascending–descending contour, a later reference (*fol. 29b*) apparently pointing to a finalis that is low (*āḫ ir maḥ aṭ ṭ at ra's al-hank min al-līn*), is weakened by the fact that the key term *maḥ aṭ ṭ (a)* [84] is potentially ambiguous, for it can mean simply the lowest pitch, and not necessarily the finalis. Indeed, the passage in which it appears goes on to say, speaking of *zankulā* , that it ascends to the *rast* from which it (sc. *ra's al-hank*) began (*nataj*), pointing rather to a descending–ascending contour, and the case for this is strengthened by evidence elsewhere: with *'irā q* , for example, the initial movement is most definitely descending, and the notes listed are also equated with *ra's al-hank* ; a further indication is supplied by Ibn Kurr's account of *iṣ bahā n* (5.8.3), where the relationship between the two requires that the more significant *rast* of *ra's al-hank* (and hence, presumably, the initial and finalis) be the upper one; and an even more conclusive statement that *ra's al-hank* begins with a descent occurs in the section on *ʿuššāq* (5.8.8).[85]

For *ʿirāq*, Ibn Kurr later supplies a fuller (and rather different) definition, but one that still has an initial descent. However, for the moment it may be represented on the basis of the present abbreviated evidence, which is unambiguous as to its place within the gamut, in relation to which the later evidence allows us to situate both *ra's al-hank* and *zankulā* (although without implying that they could not appear at other positions). Thus in the fuller account (5.8.1), where *ʿirāq* again begins from *rast* 3 = g, this is 'the note from which the beginning (*šayl*)[86] of *ra's al-hank* is bodied forth (*taṣawwar*).'

Accordingly, in the absence of any explicit indication of prominence, we have:



It may be noted, though, that *zankulā* is not, like *ra's al-hank* and *ʿirāq*, counted as one of the 'four delightful modes': the other two, we will later find, are *zīlakand* and *iṣbahān*, thus making up exactly the traditional first four of the set of 12 *šadd* modes.

As will frequently happen with the following mode descriptions, Ibn Kurr proceeds to add some comments on modal affinities (expressed by *ḥasuna bi*, 'to go well together with'). The result in this instance is a complex web of references to entities that have not yet been defined: the reader is clearly supposed to come well informed. We are merely told that *ra's al-hank* goes well with modes beginning (*nataj*) from *rast* notes above, such as *ʿuššāq*, and *iṣbahān*, which descends to it beginning from the *rāst* above, and *iṣbahān* again when it begins from the third *rāst* above

fol. 29v

and ends on the second. From this we can at least make one or two simple and obvious deductions:

- that we are dealing with modal entities of restricted compass, perhaps ones containing a characteristic tetrachord or pentachord element that serves to define them;
- that modes can be introduced at different pitches in relation to each other;
- that *iṣbahān* may occur at two different positions, one a fourth above the other;
- and that, assuming a descending–ascending contour, *ra's al-hank* would not begin on b♭′, *rast* 6 (since nothing could be above it).

One might wish to add that it would be unlikely to begin on f′, *rast* 5, but this is a conclusion that depends upon the position of *iṣbahān* being calculated in relation to the upper *rast* of *ra's al-hank* rather than the lower, and there is so far no way of knowing which is intended.

Such imponderables multiply as we proceed, for it is in such passages, and especially in the early stages of the *muqaddima*, that we encounter proleptic references to other, hitherto undefined modes. Thus with the information so far available this particular passage cannot be fully unpicked, as a literal (but still very uncertain) translation makes painfully clear:

> If you flesh that out (*ṣawwar*), then [do it] with *iṣbahān* from the second *rast* above, descending on its *rast*, and such as *dūkāh* of the second *rast*, ascending from it and descending to it, and such as *dūkāh* of the second *rast* functioning as its *banjkāh* which descends to the *rast* it began from; and with *zankulā*, which begins (*nataj*) from the *rast* which is its lowest note (*āḫir maḥaṭṭih*), ascending to the *rast* it begins from, but this *rast* note which is the lowest of *ra's al-hank* is a lowest note shared (*muštaraka*) between *ra's al-hank* [and the beginning of *zankulā*], with *ra's al-hank* predominating (*qawiya ʿalā*), so that *zankulā* appears weak; and perform (*atābi*) *ʿuššāq* above the *rast* of *ra's al-hank*, descending onto the *rast* of *ra's al-hank*, and after that perform *ra's al-hank*.

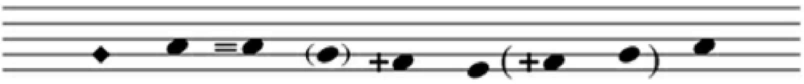
Parts of this, for example the comments on *zankulā*, make reasonable sense given what we know, but others do not, and rather than indulge in yet more speculation it is preferable, despite disturbing the flow, to defer any attempt to unravel the whole to a later stage, when further relevant material has accumulated.

5.7 The *ṣawt* 'number' modes

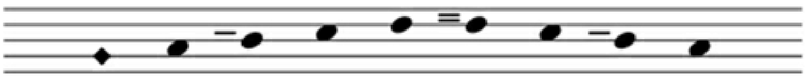
We turn, then, to the first mode to which a separate section (*faṣl*) is devoted, one with which Ibn Kurr also begins his exposition of a coherent group of modes to which he attaches the class term *ṣawt*, that is, those where the names indicate successive scale degrees: *dūkāh, sākāh, jārkāh, banjkāh, šaškāh* and *haftkāh*. None of these is mentioned by al-Urmawī, so that the first theorist to discuss this class is Šīrazī, who refers to the first four. The *ġāyat al-maṭlūb* thus shows a further enlargement of the series, and is the earliest text to do so.

5.7.1 dūkāh

As in many later texts, the numerical implication of the term *dūkāh* appears to be taken all too literally, for it is stated initially to consist of just two notes, /1 2/.[87] But Ibn Kurr then adds further material, telling us first that it is distinguished (*tamayyaz*) by the note *ramal* (2=),
fol. 30r
followed by the *sākāh* and *dūkāh* below the *rast* – probably implying, but not stating, that the *rast* note was included in this descent – with a final return to the initial *dūkāh* expressed as 'you ascend and take' (*ta'lū fa-taḫuḏ*), which could be understood as either direct or, perhaps more likely, stepwise, including therefore the bracketed notes:



He then adds a second version, the description of which is quite precise, and for once with nothing to be queried. After the initial /1 2/ it continues with a further ascent before introducing a *ramal* note:

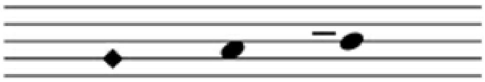


The two versions thus have a central area in common, but make different additions to it:

a) (transposed up a fourth) /4 5 5= (4) 3- 2 (3- 4) 5/
b) /1 2 3- 4 5 5= 4 3- 2/
fol. 30v

5.7.2 **sākāh**

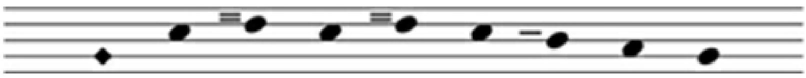
With this mode we encounter an analogous initial statement mentioning just three basic ascending notes, the last being the note *sākāh*:



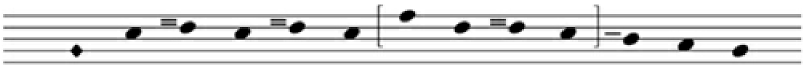
Consideration of the following comments will, however, need to be deferred, as they involve the relationship between *sākāh* and modes not yet discussed.
fol. 31r

5.7.3 **jārkāh**

One might have expected a straightforward continuation of the numerical sequence, with *jārkāh* being stated to consist of the four notes /1 2 3- 4/, but the number mentioned at the outset is, instead, nine, and the following elucidation is, precisely, of an ascending–descending contour containing nine notes:



However, it is presented almost as if consisting of two parts: the first five notes are named, followed by the phrase 'and then with four notes' (*ṯumma bi-arba' naġamāt*) and the naming of the final four. It is difficult to think that any significance attaches to this insertion, but the wording suggests that it is unlikely to be a scribal error.[88] If anything, one might conjecture that the final four notes constituted the original nucleus of *jārkāh*, with the first five, and especially the inclusion of *ramal* among them, being later additions differentiating it more decisively from *ra's al-hank*. The text continues with an unexplained addition (there is clearly a lacuna here) which begins by repeating 'with four notes' and, indeed, naming a further four: /7♭ 5 5= 4/, with 4 being called the 'house' (*bayt*) of *jārkāh*, to be understood as an indication of modal prominence.[89] Their relationship to the original nine is not explained, although as they can hardly be an alternative version of *jārkāh* it is reasonable to assume that they constitute an optional additional element, presumably, then, one injected within the basic version rather than tacked on the end:

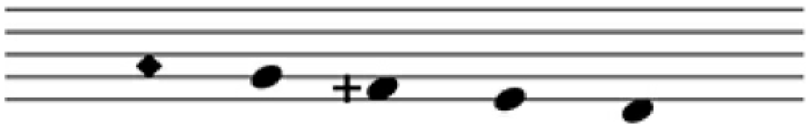


Although reasonably persuasive as a melodic shape, this does, however, require that the fourth extra note, the *bayt*, coincide with one already present, so that the total number is 12 rather than 13. There is, unusually, a brief separate section on *jārkāh* much later (discussed in 5.15.2), but it fails to shed any light on this particular issue.

The listing of the four extra notes is followed by the comment that 'it' is called *nikārī* if a further addition is made, the 'it' probably referring to the augmented form of *jārkāh*. For *nikārī* see 5.12.1.
fol. 32r

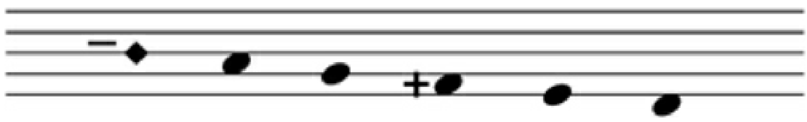
5.7.4 banjkāh

Here, in a brief, direct, and mercifully clear account, we revert to the expected number of notes, listed this time in descending order:



5.7.5 šaškāh

With similar brevity, one note is added above the five of *banjkāh*, to arrive at:



fol. 32v

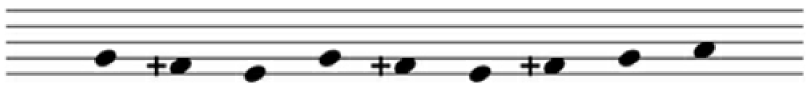
After *šaškāh* the series continues logically with *haftkāh*. However, instead of involving the expected addition of yet another note above, the definition is of a form of modal combination involving transposition, and, as one of the modes involved is *'uššāq*, which has not yet been described, consideration of *haftkāh* will have to be deferred. It is discussed in 5.13.

5.8 *hank* modes (2)

We now arrive at the main block of *hank* modes, including *'irāq*, already mentioned, but excluding *ra's al-hank*, presumably because the previous material dealing with this mode (see 5.4.2 and 5.6.1) was deemed sufficient.
fol. 33r

5.8.1 'irāq

In this case, however, a second and fuller definition is given. Previously, *'irāq* was characterized as one of four 'delightful' modes with a rising–falling contour, but when the notes were itemized (5.6.1) a descending line emerged. Ibn Kurr now gives a more extended version, with the number of notes stated to be not five but nine. The melodic shape, beginning from *rast* 3 (= g), is then defined quite precisely:

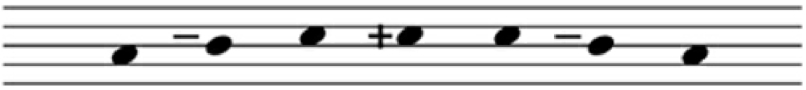


and is immediately followed, with a syntactic stutter, by the statement 'for this reason *'irāq* is called the second *hank*, because …'. The following explanation, which at first sight seems not to be one, involves referring to the use of the same *rast*, g, as the initial note of both *ra's al-hank* and *'irāq*, which therefore ends on a, and noting that *'irāq* descends via *ḥijāzī*, the lowest pitch of which is c+, thus introducing, unhelpfully, yet another hitherto unknown quantity, but at least indicating that *'irāq* would normally combine with another mode to produce a more complex contour covering a wider range. It may be suggested that the explanatory power of these remarks is to be sought in the emphasis they place on modes overlapping as they traverse a given tonal space, for as the discussion in the section on *iṣbahān* (5.8.3) demonstrates, the way in which the spans of the four nuclear modes partially coincide is seen as a crucial feature of the relationships between them.
fol. 33v

5.8.2 zīlakand

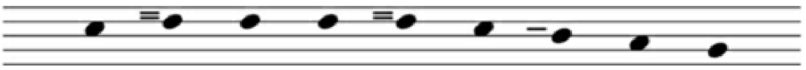
Here, for the first time, we are introduced to the concept of the half note (*niṣf naġma*), the initial definition of *zīlakand* being that it consists of six and a half notes. In the course of the description,
fol. 34r
having reached a *rast* note, we are told to take 'half a note of *ramal* above the *rast*', and this is followed by a definition of the half note: it is to deviate (*'udūl*) from the pitch (*ḥidda*) of a note without descending (*hubūṭ*) as far as the adjacent note below (*naġma tujāwiruhā min al-līn*). As discussed in 5.3, comparison with the corresponding Systematist version suggests strongly that the half *ramal* note has the value 1+.

The initial *dūkāh* of *zīlakand* is equated with the highest note of *'irāq*, a, and this is used to connect it to the other members of the nuclear four. More precisely, it is said to be the reason for it being the third mode in relation to *ra's al-hank*, because the highest note of *'irāq* is the *dūkāh* above the *rast* of *ra's al-hank* (that is, the fact that the highest note of *zīlakand* is higher than that of *'irāq* places it after *'irāq*, the second of the four). The definition given is:[90]



5.8.3 iṣbahān

The nine notes of this mode begin, we are told, with the *rast* above that of *ra's al-hank* . The latter should refer to the higher of the two in *ra's al-hank* , its initial and finalis, and that this is so is confirmed by the identification of the finalis of *iṣbahān* as the note from which *ra's al-hank* and *'irāq* begin, g,[91] pointing to c′ as the initial note of *iṣbahān* . There is nothing problematic about the following description of the constituent nine notes, which yields the following outline:
fol. 34v

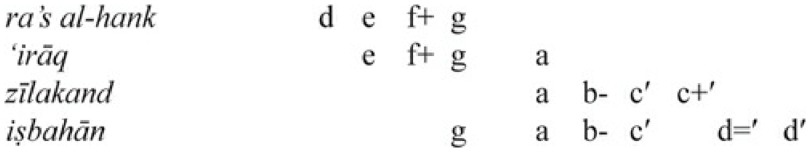


The series of statements that follows links the four nuclear modes together:

- the finalis of *iṣbahān* , g, is the initial (*šayl*) *rast* of *ra's al-hank*
- and likewise the note from which *'irāq* begins
- *iṣbahān* rises to the highest note of *'irāq* , its *dūkāh* (= a)
- this is the initial note of *zīlakand* , which rises to the [half-]*ramal*[92] (c+′) above the next *rast* (c′)
- this is the note from which *iṣbahān* begins (*šayl*), ascending to the *dūkāh* (d′) above the [half-]*ramal* which is the highest note of *zīlakand* .

Accordingly, he continues, the notes of *zīlakand* and what he calls *ra's al-'irāq* are situated (*daḫal*) between the [lower] *rast* of *ra's al-hank* and the highest note of *iṣbahān* . His conclusion is that this demonstrates that *iṣbahan* is the fourth *hank* of *ra's al-hank* , that is, of the nuclear four modes: *'irāq* is the second, *zīlakand* the third, and *iṣbahān* the fourth, this being contrary to the mistaken view of the Persians, who place
fol. 35r
iṣbahān third and *zīlakand* fourth.

This order is not, though, restricted to Persian sources: it is also that adopted in the preliminary version of the *kitāb al-adwār*[93] and maintained by al-Irbilī, so that Ibn Kurr appears to be arguing against an orthodoxy, and it is interesting to observe that his logic, even if not stated explicitly, is strictly musicological: for him the order should be determined by how high the range goes:

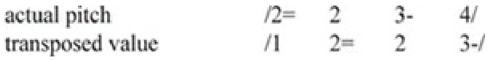


ra's al-hank	d	e	f+	g						
'irāq		e	f+	g	a					
zīlakand					a	b-	c′	c+′		
iṣbahān				g	a	b-	c′		d=′	d′

It remains to be noted that as *šāl* always means 'to ascend', the obvious assumption would be that the reference in the first of the above series of statements to the *šayl* of *ra's al-hank* means that it ascends from g rather than descends. This, though, would run counter to the logic of the passage as a whole, and we may take *šayl* here to indicate here onset or progression (in a semantic extension of the basic meaning of 'carrying' or 'bearing') without specifying the direction involved, descending in *ra's al-hank* as against ascending in the fifth statement with regard to *iṣbahān* . That it can relate to descending movement is confirmed by its use in relation to the first note of *māyāh* (5.8.5), which is followed by the note below.

In conclusion, each of the notes of *iṣbahān* is listed in an ascending sequence and stated to be a possible finalis, a feature unique to this mode. Ibn Kurr singles out the first to be mentioned, the lowest note, g, as the 'complete' or 'perfect' finalis (*maḥaṭṭ kāmil*), and attaches a name, *al-iṣbahān al-bastāh* , to the form with b- as finalis, an indication that it was sufficiently distinctive to be considered an independent modal entity, and it is referred to again in the second of the immediately following three sections. These precede the next *hank* mode, *māyāh* , and present two modal combinations of, or derivations from, *zīlakand* and *iṣbahān* .

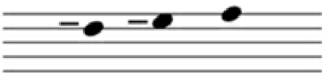
5.8.4.1 ḥiṣār al-zīlakand
Here we have to deal for the first time with transposition, which is sometimes described in a manner that is difficult to unravel. The section begins by saying that *ḥiṣār al-zīlakand* is the *sākāh* of a *rast* given the value (*muqaddar*) of the *ramal* above the notes of *zīlakand* . This is enlarged upon by giving equivalences yielding all the 'complete' notes in the 1 to 3- range of *sākāh* , simply proceeding step by step with no regard for the altered size of the intervals that results, whichever value is assigned to *ramal* :



actual pitch	/2=	2	3-	4/
transposed value	/1	2=	2	3-/

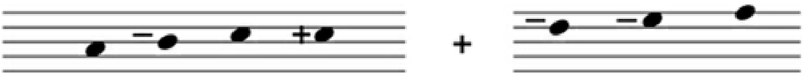
We are then told to take
fol. 35v

(the pitches yielding) the transposed 1, 2 and 3-, that is, 2=, 3- and 4, thereby replicating the original form of *sākāh*. Thus if *ramal* here has the higher value, 2-, we will have:



equivalent to /1 2 3-/, which is stated, yet again, to be *ḥiṣār al-zīlakand*.

There is no mention in the *ġāyat al-maṭlūb* of *ḥiṣār* as a separate entity, and the inference of the description of *ḥiṣār al-zīlakand* as it stands is that *ḥiṣār* designates no more than a particular transposition of *sākāh*. But the compound name seems a cumbersome way of simply indicating the pitch position concerned, and it might be thought to imply, rather, a combination of *sākāh* transposed and *zīlakand*, using therefore the following notes:



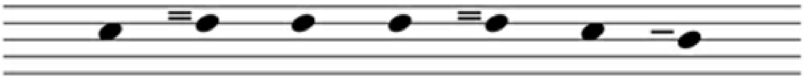
and the possibility of this being the case is strengthened by the fact that although the account of *ḥiṣār* given by Šīrāzī[94] is somewhat different – at this pitch the notes used would be a b- c′ c+′ d#′ e′ (f+′) – it is still clearly to be construed as an extension of *zīlakand*.

The existence of such a combination may also be inferred from Ibn Kurr's final remark, which informs us that sometimes *zīlakand* minus its beginning (*šayl*) is performed above this *sākāh* which is called *ḥiṣār al-zīlakand*, ending on the first *zīlakand*, that is, *zīlakand* in its original position, from a. Here, then, we have a combination with *zīlakand* both above and below, with the first note missing from the former (because identical with the f′ of *ḥiṣār al-zīlakand*). The notes used are:

a b- c′ c+′ + d-′ e-′ f′ + g=′ a♭′ a-′

5.8.4.2 Ḥiṣār al-Iṣbahān al-bastāh

This presumes the existence of an entity called *al-Iṣbahān al-bastāh*, which in turn might be thought to presume the existence of an entity called *al-bastāh*.[95] No separate section is devoted to either of these, but the former has been mentioned in the course of the discussion of *Iṣbahān* (5.8.3), which, Ibn Kurr says, is called *al-Iṣbahān al-bastāh* when the finalis is b-, and here, in the introduction to *ḥiṣār al-Iṣbahān al-bastāh*, it is stated to be *Iṣbahān* without its two lowest notes (g and a). Retaining the original contour of *Iṣbahān*, we would have, accordingly:



As for *al-bastāh*, this term appears at the end of the section on *sākāh*, in a passage (*fol. 31a*) that gives it as a name for *ḥiṣār* [*al-*] *Iṣbahān* shorn (*nāqiṣ*) of certain notes. This resembles the definition of *al-Iṣbahān al-bastāh* as *Iṣbahān* without its two lowest notes, and it is therefore probable that *al-bastāh* is merely a reduction of *ḥiṣār al-Iṣbahān al-bastāh*, especially as we are told that it will be discussed in due course, and the only section to which this remark could refer is, precisely, that on *ḥiṣār al-Iṣbahān al-bastāh*.

In the following account, *ḥiṣār al-Iṣbahān al-bastāh* is referred to first by another abbreviation, as 'this *ḥiṣār*' (that is, in contrast to the preceding *ḥiṣār al-zīlakand*) and is defined in similar terms, also as *sākāh*, but this time placed above what is simply called *Iṣbahān*.[96] There is no further mention of *bastāh*, but that *Iṣbahān* here is shorthand for *Iṣbahān al-bastāh* is clear from the following description, which speaks of beginning the transposition from the top note of *Iṣbahān*, d′, after its cadence (*maḥaṭṭ*) on b-, thereby also confirming that we are dealing with a modal combination. The d′, *dūkāh*, is considered a transposed *rast* and, as before, we are given equivalences for all the 'complete' notes in the 1 to 3- range of *sākāh*, with no regard for the altered size of the intervals that result:

actual pitch	d′	e-′	f′	g=′
transposed value	c′	d=′	d′	e-′

Ibn Kurr then reiterates that *ḥiṣār al-Iṣbahān* is *sākāh* transposed upwards (*murtafiʿa ʿan maḥaṭṭihā*).

There is also a second version, presented in the following section (*fol. 36r*). This is an otherwise otiose statement of the difference between *ḥiṣār al-Iṣbahān* and *ḥiṣār al-zīlakand* that does no more than rehearse the pitch levels to which *sākāh* is transposed in them, with the obvious conclusion that *ḥiṣār al-Iṣbahān* is higher in pitch (*ṭabaqa*) than *ḥiṣār al-zīlakand*. It repeats the definition of *ḥiṣār al-zīlakand*, but in the version it offers of *ḥiṣār al-Iṣbahān al-bastāh* just three notes remain: the division of the first whole tone of *sākāh* is avoided, but at the same time it is compressed, and the correspondences are again asymmetrical, with the range of the transposed form being different from that in the first version:

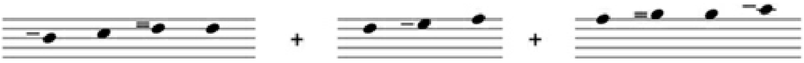
actual pitch	d′	e-′	f′
transposed value	c′	d=′	e-′

A number of conclusions can be drawn from this curious asymmetry. One may note, first, that *sākāh* as /1 2 3-/ could be transposed exactly from c′ to d′, becoming /d′ e′ f+′/, but this requires the use of two half notes; and similarly that the use of the half note e′ would allow retention of the initial (divided) whole tone in the first version. To be suspected, therefore, is a reluctance, or even an absolute refusal, to employ half notes in the transposition when the original form of the mode does not contain one. In addition, we are faced with the curious phenomenon of the inclusion of extra notes: Ibn Kurr's method simply involves giving equivalences for all the 'complete' notes in the target range and then (but only sometimes) selecting the relevant ones. On the basis of the introduction of a *ramal* note in *dūkāh* one might speculate that, even if not mentioned in the description of *sākāh*, the same addition could be made, but it is clear that the three-note version was normative (and later examples of transposition will also include redundant extra notes). As the above examples show, the 'complete' note equivalences result in distortion, and the basic *sākāh* form is reproduced exactly in neither transposition, thus raising the question of how readily it would actually be perceived as *sākāh* – it is almost as if the term is reduced to designating no more than a cell of three notes, irrespective of the size of the intervals between them.

Ibn Kurr concludes the section with what appears to be a tripartite entity parallel to that involving *ḥiṣār al-zīlakand*, where *zīlakand* appears both above and below. He states that

fol. 36r

ḥiṣār al-iṣbahān goes well together with another higher, transposed *iṣbahān* that cadences on the *sākāh* transposed above the first *iṣbahān*, and assuming that the first *iṣbahān* is also included we arrive at a similar sandwich structure. The phrasing suggests various possibilities, but the simplest and most attractive is to assume that *sākāh* here refers to the highest note of *ḥiṣār al-iṣbahān*. There remains the question of whether the reference is to the full form of *iṣbahān*, or to the reduced *al-iṣbahān al-bastāh*, and preference needs to be given to the latter on the ground that from f′ the full form would go beyond the existing range to c″. Including the customary transpositional distortions, the notes used would be, accordingly:

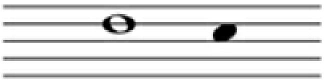


5.8.5 **māyāh**

The *hank* series is resumed with *māyāh*, the definition of which, after the preceding complexities, is refreshingly simple: it consists of two notes, the first being the *dūkāh* of

fol. 36v

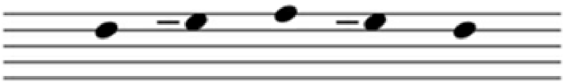
rast 4, this to be prolonged (*taj'al lahā zamanan*), thereby signalling prominence, and the second the *rast* below:



It may be recalled that Ibn Kurr is in agreement with other early authorities, as well as with his contemporary al-Irbilī, in placing *māyāh* among the principal group of modes, whether consisting of eight or twelve, and not, as with al-Urmawī, among the secondary group of six *āwāzāt*. The arrangement introduced by al-Urmawī, who exchanges it and *ḥijāzī* between the *šadd* and *āwāz* groups, is an innovation followed in other Systematist texts, but not necessarily elsewhere.[97]

5.8.5.1 ḥiṣār al-māyāh

Included immediately after *māyāh*, this is termed a *ṣawt*, whereas *ḥiṣār al-zīlakand* and *ḥiṣār al-iṣbahān al-bastāh* are not, thus possibly suggesting for it a greater degree of independence. It is defined as consisting of five notes, the first being the initial note of *māyāh* (d′). There is no ambiguity about the following four, so that we have:

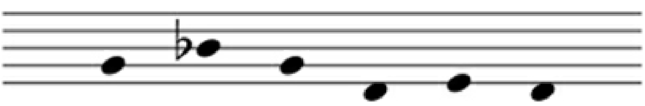


As there is no indication that this was combined with *māyāh* itself, the reference appears to do no more than fix one of the pitch positions at which *ḥiṣār* could occur. But despite the fact that the notes of *ḥiṣār al-māyāh* are the same as those of *ḥiṣār al-iṣbahān al-bastāh*, exactly what constituted *ḥiṣār* is unclear: there is no section devoted to it, so that we have only its various manifestations in *ḥiṣār al-zīlakand, ḥiṣār al-iṣbahān al-bastāh* and *ḥiṣār al-māyāh*. The fact that all three names have the grammatical form of a possessive construction points to them being less a combination of equals than variant forms of the second element. Further, comparison of the three suggests an additional reason for the absence of a separate definition, for they point to *ḥiṣār* being less a fixed form than a variable sequence of two intervals, the common factor of which is that they all occur in a high register. In two cases it is equated with a transposition of *sākāh*, but in only one might it provide an exact correspondence, while the other has the same intervals as *ḥiṣār al-māyāh*:

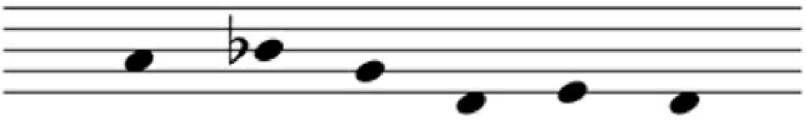
[*sākāh*	1	2	3-]
ḥiṣār al-zīlakand	d=′	e-′	f′
⌈*ḥiṣār al-iṣbahān*	d′	e-′	f′
⌊*ḥiṣār al-māyāh*			

5.8.6 abū salīk[98]

The initial statement of resources, five notes and a half note, is unambiguous, but the text of the following description is unfortunately corrupt. The half note is the one below 3-, that is, we may safely assume, 3♭, and if we take the text as it stands and follow its listing of the notes, the first of which is identified as g, we arrive at g b♭ g d B A. But that this cannot be the right result, despite having the right number of notes, is demonstrated by the fact that the last one is stated to be *rast* 2 = d, and that this is the correct finalis is confirmed in the section on *nawā*. The problem would be solved if we assume that the statement that it descends (*ṯumma yahbiṭ*) has been repeated at a point where the direction is in fact reversed. Accordingly, if we substitute *dūkāh* 2 (= e) for *dūkāh* 1 (= B) we arrive at a shape with the correct initial and finalis:



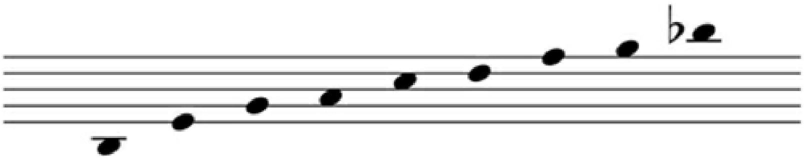
Unfortunately, there are references to *abū salīk* elsewhere indicating that this version, too, is suspect. The most explicit comes in a later section, discussed in 5.10.5, that unexpectedly defines another mode as a reversed (*ma'kūs*) version of *abū salīk*, and states quite unequivocally that the original form of *abū salīk* begins on *dūkāh* and ends on *rast*. To this may be added a statement in the section on *dūkāh* to the effect that although *abū salīk* could feasibly be performed from any *dūkāh* of the four *rast* notes (presumably *rast* 2–5), it should really only be performed from *dūkāh* 3 (= a) – and there is nothing to suggest that we are dealing with a transposed form. Further confirmation that a is the initial note is given in a reference to *abū salīk* in the section on *ḥijāzī*. This evidence clearly points either to the loss of a note preceding *rast* 3 in the definition, or to the specification of *rast* 3 as initial being an error. The latter is to be preferred, as the former would lead to an increase in the total number of notes. Emending the text accordingly,[99] we arrive at:



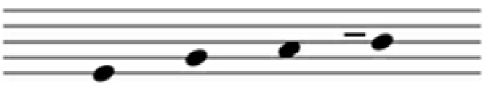
fol. 37r

5.8.7 nawā

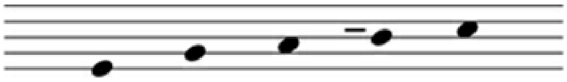
The name *nawā* (a noun meaning 'remoteness', 'distance') is derived, Ibn Kurr tells us, from 'distance' (*bu'd*) because of its 'length' (*ṭūl*), that is, its range, which turns out to be the greatest of all the modes described. It consists of nine notes making a series of first finger and open string notes across virtually the whole range of the instrument:[100]



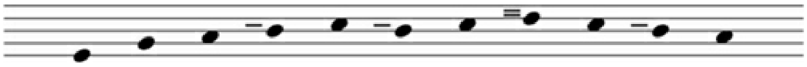
Unusually, it is said to begin after *abū salīk* reaches its finalis on d, and the specification of the nine notes is followed
fol. 37v
by the injunction that after the highest note is reached, *'uššāq* should be performed from d, again identified as the finalis of *abū salīk*, while a further remark underlines the exceptional nature of *nawā* by pointing to the absence from it of any *sākāh* or *ramal* notes, except, Ibn Kurr cryptically adds, when other modes (*anġām*) are generated (*tawallad*) from *abū salīk*, which is descending, and *nawā*, which is ascending, each being the opposite of the other. This is rather opaque, since a combination of the two would still not include a *ramal* or a *sākāh*, unless one counts the half *sākāh* b♭ of *abū salīk*. However, further specification is then given, after a repeat of the assertion that *anġām* are derived from them, with the immediate listing of four notes (*naġma*), /2 4 5 6-/, which are said to constitute an independent modal entity (*naġam mustaqill*). Where it would be placed in relation to *abū salīk* and *nawā* is not stated, but the most likely position is within the area common to both, so that we have:



This entity is sometimes performed complete, as it is (*bi-kamā lihā*), but sometimes it has added to it the *rast* above:



producing another independent modal entity, which in turn can have added to it
fol. 38r
the already used *sākāh* and the already used *rast* above, then the *ramal* above that, and then a descent to *dūkāh*. Assuming this to be stepwise, we would have:



It is entirely unclear why these three were thought to be derived from *nawā* and *abū salīk*, and particularly the third, which contains both a *sākāh* and a *ramal*, when it is precisely the absence of these notes that is deemed characteristic of *nawā* and *abū salīk*. Considering just the pitches they contain one might have expected, rather, mooted derivations from various other modes, such as *sākāh* for the first and *jārkāh* or *iṣbahān* for the third.

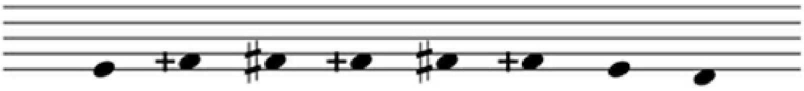
The final remark introduces a reference to a combination involving *nawā*, *abū salīk* and *rahāwī* that will be considered in 5.15.4.

5.8.8 ‘uššāq

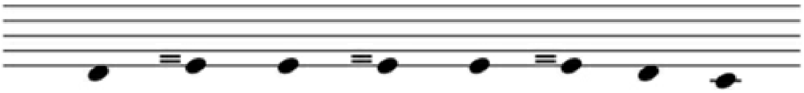
Seven notes are specified, six full (*kāmil*) and one half, the half note, we are told, being repeated. This points to a total of eight, and the following enumeration is indeed of eight notes, but what we are not told is that the six full notes this time consist of only three different ones: one of them occurs twice and another three times. The half note this time is half *rast* which, situated below *rast* and above *sākāh*, we may conclude is 3. We have been told in the section on *nawā* that after it *‘uššāq* should be performed from d, *rast* 2, whereas here the definition begins from *dūkāh*, a clear indication, then, that more than one pitch position was possible. From *dūkāh* we have:

/2 3- 3 3- 3 3- 2 1/

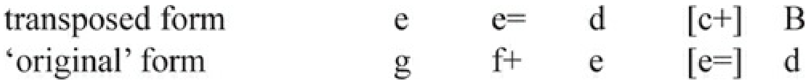
and Ibn Kurr then tells us that this mode is called *‘uššāq* (‘lovers’)
fol. 38v
because of the way it combines harmoniously (*ta’alluf*) with one far distant,[101] presumably a reference to the size of the intervening interval in the specific example mentioned, which is again *nawā* ending on *rast* 6 followed by *‘uššāq* from d, *rast* 2.[102] This, Ibn Kurr adds, is a transposition from *dūkāh* to *rast*, thereby confirming that the normal position was on *dūkāh*:



Arriving at its transposed form on *rast* 2 appears straightforward:



but it must be noted that the final whole tone requires the use of half *sākāh* (= c), for which Ibn Kurr might be expected to have chosen, in his note pairings, full *sākāh* (= c+) instead. What he actually gives is a partial enumeration of the note pairings beginning, as expected, with d e= corresponding to e f+. Predictably, there is no mention of the half *rast* of the original form, f#, so that the next equivalence is between e and g. Rather than complete the sequence, however, Ibn Kurr omits the repeated notes and goes straight to the finalis, duly avoiding the half *sākāh* needed for c but opting, instead of the expected *sākāh*, c+, the closest pitch, for the *dūkāh* below, B. Then, following his usual habit of including all the full notes, he inserts the *sākāh*, equating it with a *ramal* that does not appear in the original. The result is not one but two distorted versions, the pitches cited being:



transposed form	e	e=	d	[c+]	B
‘original’ form	g	f+	e	[e=]	d

In consequence, either we have to accept that the distortion is a by product of Ibn Kurr’s inexplicably reductive treatment of transposition whereby the half notes that would have been called upon in performance are simply ignored; or he actually reflects adjustments made in performance, thereby, as elsewhere, raising the question of how markedly dissimilar realizations could have been perceived as manifestations of the same entity.

There are two concluding remarks. The first, that here *‘uššāq* begins from a *rast* that has the value (*qudra*) of (i.e. is a transposition of) a *dūkāh* , fits perfectly the first transposition, from initial e to d. The second states that its two liminal notes (*ṭarafāh* , 'its two ends') are two *dūkāh* (that is, the B and e of the first transposition) that have the value of two *rast* (that is, the d and g of the second transposition).

The following part of the section on *ʿuššāq* is devoted to an onslaught on Persian views of modal derivation. Apparent from the above, for Ibn Kurr, is the falsity of the claim that *rast* (= *ra's al-hank*) generated *ʿuššāq* and *zankulā* , on the ground that *ra's al-hank* begins by descending from a *rast* note to the next *rast* below, while *zankulā* proceeds
fol. 39r
from the *rast* note (presumably *rast* 2) to the one above, and *ʿuššāq* begins on a *dūkāh* between two *rast* notes (that is, presumably, the *dūkāh* between these two *rast* notes), and has an ascending–descending contour: it is therefore not correct that these three modes (*anġām*) all begin from the same position (*makān*) – the unspoken conclusion being that this is what the Persians claim. Whatever the force of the argument, it is significant that it is conducted in purely musicological terms relating to modal structure: there is no hint that there might be a possible cosmological rationale underpinning this derivational scheme.

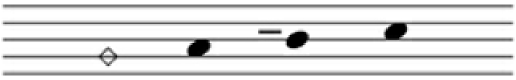
Ibn Kurr then switches brusquely to discuss pleasing modal combinations involving *ʿuššāq* , after which he widens the discussion to consider the previous modes as a group. He regards *ʿuššāq* as the last of the eight *hank* modes, and it is at this point that he introduces his identification of them with the Byzantine *oktoechos* , discussed in 5.4.2. The section then concludes (*fol. 39b*) with an announcement of a discussion of 'the remainder', by which is to be understood, even if the set of 12 is not recognized, the other four *šadd* modes, its purpose being to demonstrate yet again the falsity of Persian views about derivation, in this instance the claim that four modes generated eight, and that each one of six (that is, the six *āwāzāt*) is a derivate (*farʿ*) of two (of the 12 *šadd* modes). [103]

5.9 *ṣawt* modes (2)

There follow accounts of *zankulā , buzurk* , [104] *rahāwī* and *ḥusaynī*, all of which, for both al-Urmawī and al-Irbilī, belong, together with the preceding modes, to the *šadd* group. Three of them, though, are assigned by Ibn Kurr to the *ṣawt* category, and it would seem logical to suppose that the fourth, *zankulā* – in fact the first to be discussed – was also considered by him to belong to this group. However, he gives no category label to it in the section heading, unlike the others, and the omission may well be deliberate, for although he connects it to another group of *ṣawt* modes, the term *hank* is also invoked in relation to them, thus making its position among the modal categories somewhat indeterminate.

***5.9.1* zankulā**

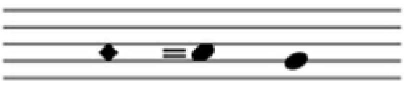
Ibn Kurr repeats the definition previously given (5.6.1): it is four notes rising from a prominent *rast* (which one is not specified). Its prominence is again expressed in temporal terms, with the phrase *bi-zaman mutamakkin* ('with a lasting duration'):



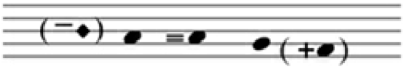
The following discussion begins with a repeated condemnation of the Persian view that *zankulā* is derived from *ra's al-hank* , and drives the objection home by asserting that it ought rather to be the case that *ra's al-hank* emerged (*nataj*) after it when melodies/modes were derived (*ʿinda-'stinbāṭ al-aṣwāt*) from the *ṭabaqa* , possibly meaning the general pitch set, but more probably referring to the pitch area common to both. Accordingly, it takes precedence (*muqaddam*)
fol. 40r
over *ra's al-hank* because it precedes (*taqaddam*) it in derivation (*istibāṭ*). But why this should be so is not explained (although one might wish to relate it to the fact that *zankulā* consists of a straightforward ascent as against the descending–ascending line of *ra's al-hank*), and the argument has the air of special pleading. Ibn Kurr then proceeds to underline the claim to priority made on behalf of *zankulā* by linking it not to the nuclear quartet of *hank* modes but to a different yet parallel group. It is, to echo the previous phrasing, one of four delightful (*muṭrib*) ascending and descending modes – but *ṣawt* rather than *hank* – within which it should be regarded as having the status of *ra's al-hank* : all of them, he says, driving the point home with casuistic relish, should accordingly be termed *hank* . The group consists of *zankulā , ḥijāzī, ʿukbarī* and *sāzkarī*, and it is one, he adds in a final remark, the consonance (*mulāʾama*) of which in relation to the *ṭabaqa* (possibly the segment of the gamut they occupy) is superior to that of the previously mentioned two circles (*dāʾira*), that is, the two sets of four modes making up the eight *hank* : it is almost as if it is this group that should complete a set of 12 *hank* (= *šadd*), rather than the four universally acknowledged by other authorities.

***5.9.2* buzurk**

This is first cryptically referred to as a *ṣawt* mode that is concealed or lurking (*kāmin*) beneath *ḥijāzī* (5.10.7). For the description a mere three notes suffice, but having specified them as

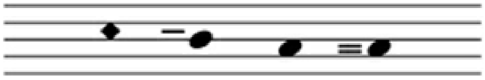


Ibn Kurr continues by saying that *buzurk* lies between two *sākāh* notes, that is, 3- and 7 -. While obviously true, the statement seems otiose, unless it is understood as an implied reference to the relationship between *buzurk* and *ḥijāzī*, which occupies the 3- to 7- zone, and/or an indication that these notes were potential additions to a three-note nucleus, in support of which it may be noted that 3- is referred to as its upper limit (*muntahāh fī al-ḥidda*). The addition of these will yield:

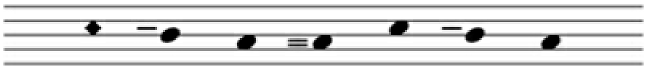


5.9.3 rahāwī

The initial statement equates it with *ra's al-hank* descending (*habaṭ*) to *ramal*
fol. 40v
minus (*naqaṣ*) its lowest note (*maḥaṭṭ*), which suggests:



and this is confirmed by the following list of the notes it contains. But Ibn Kurr then adds that it may be reinforced (*aqwā/qawwā*),[105] after completing the descent, by the addition of three further notes, which are a repeat of the first three, so that we have in all:

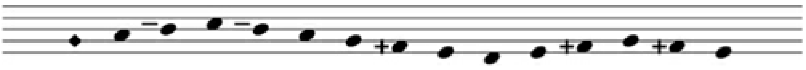


He ends his section on *rahāwī* by renewing his onslaught on Persian views of modal derivation. Here he rejects the derivation of *buzurk* and *rahāwī* from *zīlakand*, described, as usual, as inconceivable (*laysa bi-mutaṣawwar*), on the grounds that *zīlakand* starts from 2, rises to 4+ within the same pitch zone (*ṭabaqa*) and descends again to 2, whereas *buzurk* begins on 2 and ends on 1 and *rahāwī* begin on 4 and ends on 2=,[106] which demonstrates that they are[107]
fol. 41r
independent, autonomous (*istaqall bi-ḏātih*) *ṣawt* modes. Although the nature of the argument is not made explicit, it may be assumed to be of the same order as before: these modes do not have the same initial note (and to that could be added that they do not have the same finalis either).

5.9.4 ḥusaynī

There is a further reference at the beginning of the next definition to the concept of a pitch zone (*ṭabaqa*), this time one within which the 15 notes of *ḥusaynī* are contained. This total means it has more notes than all the other modes,[108] even, Ibn Kurr adds, exceeding *iṣbahān* in length. It is reasonable to assume that the reason for this seemingly unnecessary last remark is to be found in the immediately following rejection of the Persian view that *iṣbahān* engendered (*antaj*) *ḥusaynī* and *nawā*. However, the justification that follows does not refer to differences in length: it is, rather, that *ḥusaynī* does not contain a *ramal* note within the pitch zone in question and neither does *nawā*, which also omits any *sākāh*, whereas both these notes are obligatory in *iṣbahān*. Thus although the argument differs from that used before it is again a purely musicological one. Ibn Kurr then repeats the conclusion reached for *buzurk* and *rahāwī*: this demonstrates that they are independent, autonomous (*mustaqill bi-ḏātih*) *ṣawt* modes.

We then have a note-by-note outline of the structure (*tarkīb*) of *ḥusaynī*, which Ibn Kurr describes
fol. 41r–v
as a sinuous melodic contour:



He adds, finally, that *ḥusaynī* has a *māyāh*, to be described in due course (*fī mawḍiʿihā*). The reference is to *māyāh al-ḥusaynī*, dealt with in the following brief section – 'in due course' in effect meaning 'immediately'.

5.9.4.1 māyāh al-ḥusaynī

It is stated, succinctly, to consist of /2 7 -/, that is, specifically, the *dūkāh* of the *rast* above the initial *rast* of *ḥusaynī* followed by the *sākāh* which is the third note of *ḥusaynī*, and there follows an almost equally terse section on the difference
fol. 42r
between *māyāh abī salīk*[109] and *māyāh al-ḥusaynī*. It begins by referring back to what has been previously stated about

5.9.4.2 māyāh abī salīk

There is, however, no section devoted to this mode or modal combination: rather, there is just a remark in the section on *abū salīk* to the effect that *māyāh* may be used above, and a corresponding one in the section on *māyāh* to the effect it descends to *abū salīk* below. Here he summarizes *māyāh abī salīk* simply as consisting of /2 1/, which is the same as his definition of *māyāh*, lacking only its precise pitch location. As the highest note of *abū salīk* is b♭, these indications are in conformity with the positioning of *māyāh* itself at d′ c′, but they add nothing to indicate what the difference might be between *māyāh abīsalīk* and *māyāh* simply followed by *abū salīk* :

d′ c′ + a b♭ g d e d

and appear to point to a conventional sequence of pre-existing elements rather than a novel entity. Just such a conventional sequence, it might be suggested, could lie behind the earlier inclusion by al-Tīfāšī of *māya bū salīk* rather than just *bū salīk* in his set of 12 main modes.[110]

A contrast is then drawn with *māyāh al-ḥusaynī*, defined once again laconically as /2 7-/. This suggests that the term *māyāh* could be associated with note pairs different both in direction and size of interval, but possibly linked, like the different forms of *ḥiṣār* , by being in the same high register, although in the case of *māyāh al-ḥusaynī* the second note lies within, rather than beyond, the range of *ḥusaynī*. To conclude, Ibn Kurr adds the further specification that *māyāh al-ḥusaynī* is one note below *māyāh abīsalīk* , thus allowing us to position the 7- of the former below the c′ of *māyāh* in the latter. It follows that *māyāh al-ḥusaynī* would be positioned at d′ b-, which implies in turn that *ḥusaynī* would (or at least could) begin from g.

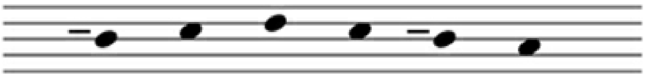
5.10 The *āwāẓāt* modes

Ibn Kurr now proceeds to an exposition of the structure (*tarkīb al-naġamāt*) of six modes that, as his introductory remark makes clear, have been grouped together by the Persians on the basis of the claim that 'there are six *āwāẓāt* resulting (*nataj*) from 12, with a derived mode (*far'*) from each pair of original (*aṣl*) modes'. This, evidently, is a claim to be demolished, and in each case he will begin by citing, and rejecting as erroneous, the derivation in question. The initial phrase *tarkīb al-naġamāt* (rather than *tarkīb al-anġām*) is slightly unexpected, but it recurs at the end of the section and is evidently deliberate. As the plural *tarkībāt* would be expected if the meaning were 'note combinations', it seems preferable to construe the phrase as 'the structure (with specific reference to the combination of elements involved) of the modes', even if *naġamāt* does not normally have this sense.

5.10.1 **nayrūz**

In this case it is said to be an *āwāz* between, that is, derived from, *rast* and *'irāq* (and the reference to *rast* rather than *ra's al-hank* is a further indication of the Persian origin of this claim). Ibn Kurr says nothing in rebuttal at this stage, but proceeds to a definition: *nayrūz* is a compound mode (*naġam murakkab*) formed by taking a *rast* above the *sākāh* , then a *dūkāh* above the *rast* . One then descends from the *dūkāh* , making it a *banjkāh* of a *rast* that is lacking its finalis: it thus ends on the *dūkāh* of the lower *rast* .

This can be made to yield a melodic shape readily enough, but the definition has been given in full because it appears gratuitously convoluted and to that extent not wholly straightforward. The notes could have been simply listed without the reference to *rast* being 'above the *sākāh* ', or to *banjkāh* and what follows, so that, assuming these circumlocutions to be meaningful, they might relate in some way to the initial definition of *nayrūz* as a compound, even if they hardly explain its nature convincingly. If the *sākāh* in question were understood to refer to the mode, the implication would be that there was a standard progression in which *sākāh* , here /g a b-'/, preceded the remainder. The syntax, however, hardly permits this reading. The phrasing is in any case atypical, and 'the *sākāh* ' (with the definite article functioning as a demonstrative) could simply be a reference back to the final note of the preceding mode to be discussed, *māyāh al-ḥusaynī*, in which case the initial *rast* can be equated with c′, and the combination would be of an element *x* , i.e. /c′ d′/ followed by a variant or incomplete version of *banjkāh* , /d′ c′ b- a/. However, at the end of the section Ibn Kurr discusses a modal derivate in which *nayrūz* is combined with itself at a different pitch level, and here he speaks of both manifestations beginning from (the note) *sākāh* , so it would be preferable to think that the first reference to *sākāh* might economically combine both a backward glance giving a pitch position and an indication that this note was included. We would have, accordingly:

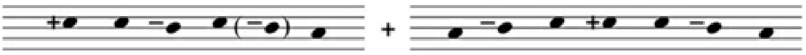


One might conjecture, further, that the allusions to both *sākāh* and *banjkāh* indicate that *nayrūz* was viewed not just as parasitic upon one or both, but as in some way intermediate between them, occupying the slot vacated by the unexpectedly different *jārkāh* .

The definition is followed by the reason for rejecting the derivation, this time couched as involving *ra's al-hank* and *'irāq* . Were this the case, the singularly unconvincing argument goes, the initial would be *dūkāh* , because the upper
fol. 42v
note of *'irāq* is a *dūkāh* .

5.10.2 šahnāz

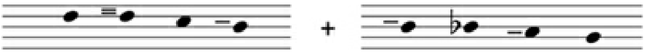
The rejected derivation in this instance is from the remaining two of the nuclear group, *iṣbahān* and *zīlakand*. Whereas *nayrūz* is stated to be a compound mode, *šahnāz* is stated to be a derivation, or more precisely a modal 'deviation' (*naġam šawāḏḏī*),[111] from the notes (*buyūt*) of *zīlakand*, formed by beginning with the half *ramal* which is the highest note of *zīlakand*, c+′; continuing with c′, b-, c′; descending to a; and then continuing with *zīlakand* in full from a. The only thing not clear from this description is whether the preceding c′ to a descent included b- or not. We have, accordingly:



Ibn Kurr then informs us that *šahnāz* is sometimes reduplicated[112] in a way that performers find complicated[113] because it is a modal deviation (*naġam šawāḏḏī*) positioned above the highest of the notes (*buyūt*) of *zīlakand*, [half] *ramal*, c+′, being performed

fol. 43r

from the *dūkāh* that is the highest note of *iṣbahān* (d′), cadencing on the *sākāh* which is the second note of *zīlakand* (b-); and then it is performed again beginning from this *sākāh* finalis, cadencing on the *rast* of *ra's al-hank* (= g). We thus have a double transposition, covering a fifth and pivoting around the neutral third, the pitches used being:



Ibn Kurr does not spell out the transposed note correspondences – perhaps fortunately, as his habit of omitting half notes (here half *sākāh* = b♭) would result in overshooting the finalis g. It may be noted that exactly the same reduplication of the notes of *zīlakand* characterizes the version of *šahnāz* offered by Šīrāzī.[114]

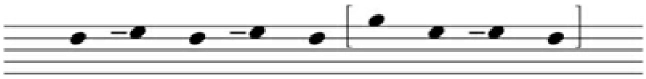
The section ends with a familiar form of rebuttal, but this time the reason offered is flimsy in the extreme: *šahnāz* cannot be derived from *iṣbahān* and *zīlakand* because the latter cadences on *dūkāh* (= a), whereas *šahnāz* cadences on the *rast* of *ra's al-hank* (= g). But this is true only of the second, reduplicated version: the first one also cadences on a; and the whole preceding account stresses that *šahnāz* is related to, and viewed as derived from, *zīlakand*, a fact that here, not unnaturally, is passed over in silence. Indeed, what is at first sight surprising is that Ibn Kurr should have attempted to make the case only in relation to *zīlakand*, ignoring the seemingly easier task of denying a possible relationship between *šahnāz* and *iṣbahān*, but although the two are strikingly dissimilar he may have been deterred by the fact that both the reduplicated version of *šahnāz* and *iṣbahān* have the same g to d′ range.

5.10.3 salmak

After simply citing the Persian derivation from *'uššāq* and *zankulā*, Ibn Kurr introduces the complication of transposition by saying that *salmak* is *jārkāh* transposed (*muqaddar*) to the *dūkāh* that is the highest note of *iṣbahān*, i.e. d′; and that this *dūkāh* is given the value (*quddira*) of *rast*, and the *sākāh* above that of *ramal*. But we are also told that from *jārkāh*, previously defined (5.7.3) as:

/1 4 5= 4 5= 4 [7♭ 5 5= 4] 3- 2 1/

the initial *rast* is omitted, as is the finalis, and that it cadences on the initial note (*bayt šaylihā*). As this must mean 4, the implication is that 3- and 2 were omitted as well as finalis 1, thus leaving /4 5= 4 5= 4 [7♭ 5 5= 4]/. Transposing this to d′, we have:



As the initial d′ could just as readily have been defined as the first note of *māyāh*, it would be reasonable to wonder whether something more than simply an identification of pitch might be implied by the reference to *iṣbahān*, but whichever the order, a combination of the two seems somewhat unlikely.

We end with the customary rebuttal, which in this case encapsulates two stages of derivation. Ibn Kurr first cites the two source modes, *'uššāq*

fol. 43v

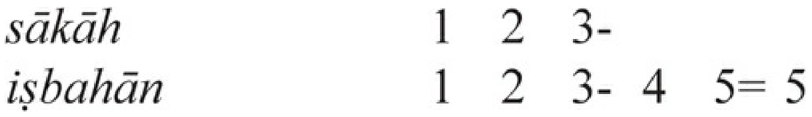
and *zankulā* which, the Persian claim, arise (*nataj*) from *ra's al-hank*, and then proceeds to reject the presumed relationship of *salmak* to them not by contrasting it directly with either of them, but on the ground of the difference between it and *ra's al-hank*: specifically, it is situated above the highest note of *iṣbahān*, whereas *ra's al-hank* is below *iṣbahān*.

5.10.4 kawašt

In this very brief section we are offered just the lapidary statement that it is a combination (*murakkab*) of *sākāh* mixed (*ḫālaṭ*) with *iṣbahān* and descending onto its 'house' (*bayt*), followed by an equally terse denial, for once with no reason given, that it could be an *āwāz* between *buzurk* and *rahāwī*.

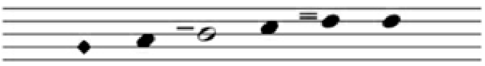
The gender of 'its' points to the 'house' in question being that of *sākāh* rather than *iṣbahān*, presumably, then, the eponymous 3-.

Given that the notes of *sākāh* are contained within *iṣbahān*:



sākāh	1	2	3-			
iṣbahān	1	2	3-	4	5=	5

the justification for including the otherwise seemingly redundant *sākāh* as a descriptor would then be that its characteristic 3-, here also the finalis, points up, in a way that a simple equation with *iṣbahān* would not, its prominence in *kawašt*:



(Although not explicitly tied to one pitch position, the identification with *iṣbahān* makes it likely that *kawašt* would normally be from g.)

5.10.5 zirkašī[115]

As with *salmak*, Ibn Kurr begins by simply citing the Persian derivation, here from *nawā* and *ḥusaynī*, and, as with *kawašt*, no reason is given for rejecting it. We are then told that it is a combination (*murakkab*) that comes in two forms (*ṭarīqa*), and what follows is introduced by the phrase 'one of them' (*iḥdāhumā*). There is, though, no reference to the other, and for this we need to go on to the next section, which at first sight seems unrelated, being ostensibly devoted to the proposition that, uniquely, *abū salīk* might be reversed (*maʿkūs*). However, the description of its structure begins in exactly the same way as in the preceding *zirkašī* section and, quite apart from the fact that there would be no rhyme or reason to the insertion at this point of a section on a variant of *abū salīk*, what also makes it clear that the heading should be read, rather, as 'sometimes it (i.e. *zirkašī*) is *abū salīk* reversed in its layout (*waḍʿ*)'[116] is the very last comment in this section, which denies that it could be an *āwāz*, as is claimed: this makes perfect sense in rounding off an account of *zirkašī* and none at all in relation to *abū salīk*, which is never assigned to the *āwāz* group.

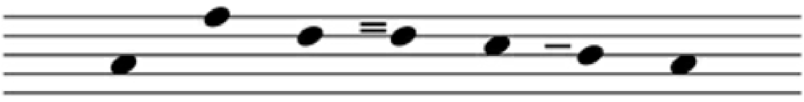
In both versions the description begins by defining two notes, 2 and 7♭, but without specifying that there was an initial upward leap. That there need not have been one is indicated by a statement in the section on *dūkāh* (5.7.1) to the effect that it goes well with both versions beginning on 7♭ in relation to the 2 of *dūkāh*, which is their finalis. As far as the first version is concerned, however, there is a clear indication that there normally was such a leap, for apart from the fact that there would otherwise be no point to the initial reference to *dūkāh*, the account ends by identifying 2 as the finalis and adding that it is also the note from which it begins. After the introduction of 7♭ we have the statement that 6-, the *sākāh* below 7♭, should be made a *ramal* and should not be used, interpretable as a curious way of formulating a jump from 7♭ to 5 by equating a note that would always be included with one that would frequently not be included. From 5 we then descend through *iṣbahān*, from which the first two notes

fol. 44r

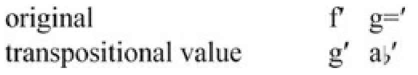
(*rast* (= 4) and *ramal* (= 5=)) are omitted, finally arriving back at 2, and as we have been told that any of the notes of *iṣbahān* can serve as its finalis there is nothing peculiar about the lack of any mention of the omission of 1. The resulting descent is:

7♭ 5 5= 4 3- 2

and assuming a connection between *zirkašī* and the term *zīr*, used elsewhere (if not by Ibn Kurr) for the fourth string of the lute, f′, we may suggest this as the optimum position for 7♭, with what follows being in alignment with *iṣbahān* at its normal pitch, and yielding:

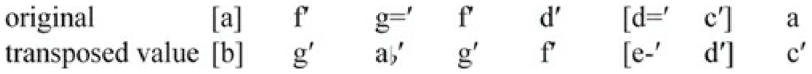


The description of the second version, that equated with a reversed form of *abū salīk*, is difficult to disentangle, and almost certainly defective. It begins in the same way, with an instruction to 'take' (*aḫaḏ*) the notes 2 (*dūkāh*) and 7♭ (*rast*),[117] which may again be identified with a and f′. This time, however, the latter is to be given the transpositional value of *dūkāh* (= g′), and there is no parallel indication at the end that 2 is initial; rather, the initial is confusingly said to be a *rast* note. There follow further transpositional correspondences, the first providing the only instance in such a context of the recognition of a half note: to the *ramal* above (g=′) is given the expected correspondence with *sākāh*, but to this is added 'one uses its half', so that we have:



original	f′	g=′
transpositional value	g′	a♭′

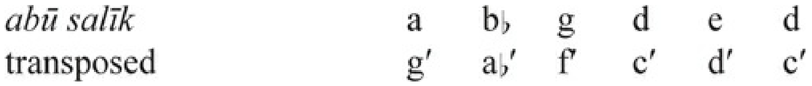
Thereafter, as in the first version, an omission is indicated, or rather two, and this time in a fashion that is rather obscure: the two *sākāh* notes between the three *rast* notes are to be made a *ramal*, and are not used with the *ramal* above the middle *rast*. Now, with the original *dūkāh* = a, the three *rast* notes are g, c′ and f′, and the two *sākāh* notes between them b- and e-′, to be identified, presumably, as the transpositions have so far been upwards, with the *ramal* notes d=′ and g=′. Ibn Kurr seems to be using the same roundabout way of naturalizing an omission as in the first version of *zirkašī*: b- and e-′, then, do not occur, while the wording clearly implies that *ramal* above the middle *rast*, d=′, does. Accordingly, Ibn Kurr continues, clarifying the progression somewhat, one begins with a *dūkāh* that was a *rast* and a [half] *sākāh* that was a *ramal*, and then descends back to the transposed *dūkāh*, then the *rast* which was the *dūkāh* above the middle *rast*, and cadences on the *rast* that is the *dūkāh* of the lowest *rast*. However, this includes only five notes as compared with the seven of the first version, does not mention the initial a, and fails to include the *ramal* cited previously: it is almost certainly incomplete. Comparison with the first version suggests that the final part of the descent, from *rast* = the original *dūkāh* (d′) to *rast* = the original *dūkāh* below (a), would not have been a bare fourth, but would have included both *ramal* (d=′) and the *rast* below it. Excluding, according to Ibn Kurr's specification, the *sākāh* notes, we arrive at the following equivalences:



original	[a]	f′	g=′	f′	d′	[d=′	c′]	a
transposed value	[b]	g′	a♭′	g′	f′	[e-′	d′]	c′

Here, though, 'transposition' seems not necessarily to relate literally to a shift of pitch (with g′ being substituted for f′, and so on) but rather to the need to capture descriptively the characteristic non-neutral semitone interval (f′ – g♭′) that could not be rendered accurately by either *ramal* or half *ramal* above f′. The remaining mismatches between the two series are a by now familiar result of note-to-note mapping, and one may conjecture that the failure to mention initial a stems from the fact that its transposed value should properly be b, a half note.

There remains the question of the association of the second form of *zirkašī* with *abū salīk* reversed. Transposing *abū salīk* to g′, we have:



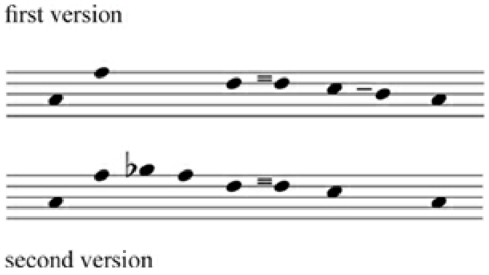
abū salīk	a	b♭	g	d	e	d
transposed	g′	a♭′	f′	c′	d′	c′

which exhibits a comparable contour to this second version of *zirkašī* and begins with the same unusual semitone ascent. These similarities would, though, disappear if it were reversed, and the concluding remarks in this section make it clear that what is intended by 'reversed' is not in fact a retrograde version of *abū salīk*, but that the identity of the initial and final notes is switched between them:

fol. 44v

abū salīk, we are told, has an initial *dūkāh* (= a) and finalis *rast* (= d), whereas the second version of *zirkašī* has initial *rast* (f′) with the transposed value *dūkāh* – thus again ignoring a as a possible initial – and finalis *dūkāh* (a) with transposed value *rast*, thus incidentally affirming the primacy of the original over the transpositional values. All this makes the reference to *abū salīk* seem rather gratuitous and unenlightening: if the identity of the initial and final notes were of any significance there are other modes, *ḥusaynī* for example, that could have been cited as parallels, so that it would be unnecessary to refer to one that had them in reverse order. The point, surely, is that Ibn Kurr actually wished to note a particular point of resemblance between the second version of *zirkašī* and *abū salīk*, both of which contain a feature not found elsewhere, but rather than describe it in positive terms restricted himself to observing the incidental reversal in the identity of their initial and final notes.[118]

Accepting the above arguments about notes having been omitted from the description, the second version may be juxtaposed with the first as follows:



Predictably, there is a final denial that *zirkašī* could be an *āwāz*, that is, derived from *nawā* and *ḥusaynī* as claimed by the Persians. As with *kawašt*, no reason is given: the whole topic seems to have become rather tiresome.

5.10.6 **kardāniyā**

Again, this is defined as a compound mode (*naġam murakkab*), and we are told that according to some it replaces *zirkašī* in the *āwāz* set. For Ibn Kurr, however, this is equally mistaken, because it consists of *jārkāh* above *rahāwī* and *banjkāh* less its finalis. In this compressed formulation Ibn Kurr may be doing more than assert that neither mode is an *āwāz*, for the reason given points also to the rejection of whatever putative modal derivation might have been claimed for *kardāniyā* in favour of the particular combination of elements cited.

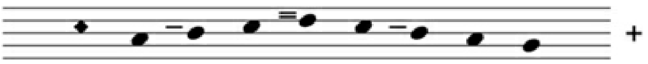
We are then told that the form (*ṣūra*) of this compound is to perform *jārkāh* both missing a note (*nāqiṣ*) and with extra notes (*zā'id*): missing the initial 1 but with the addition of 2 and 3- after (the presumably now initial) 4. The same three notes are then given with a different wording, but rather than indicating a repeat this is to be read as a restatement.

fol. 45r

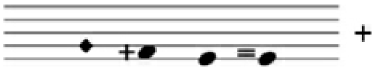
We then have the *ramal* above 4 followed by the *jārkāh* descent to 1, which is made the initial note of *rahāwī*. After the *rahāwī* descent to *ramal* there is a return to 2, followed by an incomplete descent through *banjkāh* to the *dūkāh* above the *ramal* finalis of *rahāwī*.

Although seemingly convoluted, this description is quite precise, yielding:

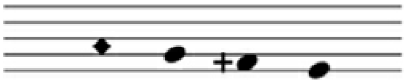
jārkāh



rahāwī



banjkāh

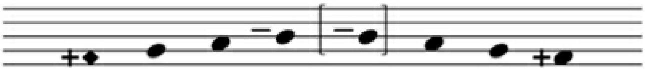


5.10.7 **ḥijāzī**

After first specifying that it consists of eight notes, Ibn Kurr plunges straight into a refutation of the Persian claim that it is an *āwāz* between *māyāh* and *abū salīk*, and this time says why. The nature of the argument is familiar: the claim is incorrect because *māyāh* begins on one *dūkāh, abū salīk* on the *dūkāh* below, while *ḥijāzī* has its beginning (*mabda'*) on one *sākāh* and its ending (*intihā'*) – in the sense of the highest pitch reached rather than the finalis – on the *sākāh* above. He then gives its *tarkīb* (here seeming to mean structure, rather than categorizing it as a compound), but only seven notes are listed, four ascending from *sākāh* to

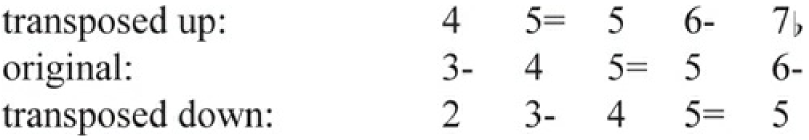
fol. 45v

sākāh followed by three descending back to the first *sākāh*. This gives a total of seven notes, and it would make sense to suppose that the highest note was repeated to make up the eight, which would yield:



This reading is supported by the resulting coincidence with the basic tetrachord of *ḥijāzī* as defined by al-Urmawī.

In the sections on two other modes there are references to a transposition of *ḥijāzī*, one a step up, the other a step down, and in both cases, as was to be expected, an extra note is included (5= in the original form). In the section on *jārkāh* (5.7.3) it is (per)formed (*ṣawwar*) a step higher: *rast* is made *sākāh*, and so on, while in the section on *šaškāh* (5.7.5) it is transposed a step down, from *sākāh* to *dūkāh*, so that we have:



transposed up:	4	5=	5	6-	7♭
original:	3-	4	5=	5	6-
transposed down:	2	3-	4	5=	5

The framing perfect fourth is retained, but in both cases the disposition of the intervals within the tetrachord is disturbed, and even if the intrusive note were deleted the second transposition would not be an exact replica (for which the nonexistent 4+ would be required in place of 5=). Its inclusion, though, distorts the equivalences further, demonstrating that, as elsewhere, Ibn Kurr is content with mapping note to note (excluding half notes), not interval to interval, with resulting but never discussed problems of perception and identity.

Finally, it may be noted that in the course of his discussion of *ḥijāzī* Ibn Kurr refers to it as a *ṣawt*, thus aligning it with *buzurk, rahāwī* and *ḥusaynī*, which for al-Urmawī belong to the *šadd* group. He thereby renders more comprehensible al-Urmawī's transfer of *ḥijāzī* to the *šadd* group in place of *māyāh*.

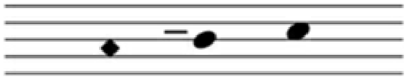
The section is rounded off with a brief reiteration: the above are the structures of the modes (*tarkīb al-naġamāt*) that have been said to be *āwāzāt*.

5.11 Other modes

Ibn Kurr's catalogue continues with a further six modes, the first of which is one unknown to, or ignored by, the Systematist theorists, although cited by al-Irbilī, for whom it is one of the three *šāz* modes.

5.11.1 **ʿukbarī**

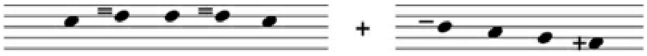
It is not, though, assigned to any category by Ibn Kurr, but simply described as consisting of three notes, of which the first is the *dūkāh* used in *ḥijāzī*, the second the *sākāh* which is the highest note of *ḥijāzī*, and the third the *rast* above, so that we have, in relation to *ḥijāzī*:



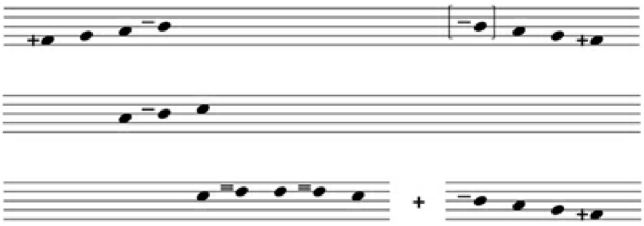
As a sequence of intervals this is identical with one of the manifestations of *ḥiṣār*, d′ e-′ f′, which suggests that *ukbarī* would normally have been located elsewhere, either at a b- c′ or e f+ g (B c+ d may be excluded if *‘ukbarī* actually overlapped with *ḥijāzī*, rather than merely being described in these terms, for *ḥijāzī* with c+ as its highest note would descend below A). Consequently, f+ g a b- and c+ d e f+ may be proposed as the most likely pitch positions of *ḥijāzī*.

5.11.2 **sāzkarī**

Similarly unassigned to any category, *sāzkarī* is described in similar terms, for just as *‘ukbarī* is linked to *ḥijāzī*, so *sāzkarī* is linked to *‘ukbarī*. There are five notes, the first being the *rast* that is the highest note of *‘ukbarī*, followed by the *ramal* and *dūkāh* above, after which it descends via the *ramal* back to the initial *rast*. This, it has to be assumed, is *sāzkarī* proper, but the text tells us that it then, presumably as a standard feature, descends through *ḥijāzī*, from its higher *sākāh* to the lower:



Juxtaposing all three, we will have, beginning with *ḥijāzī*:

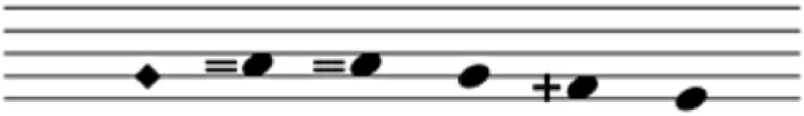


It is possible that linking them in this way in his presentation was for Ibn Kurr merely a matter of descriptive economy; but it is equally possible that it reflected a tendency to associate them in performance, thus forming a group analogous to that made up of *abū salīk, nawā* and *‘uššāq*.

fol. 46r

5.11.3 **ramal**

The section heading refers to *ramal* as a *ṣawt*, as does the description. Six notes are specified, and the outline is clear, with a repetition of a *ramal* note to underline its importance as the distinctive marker of this mode:



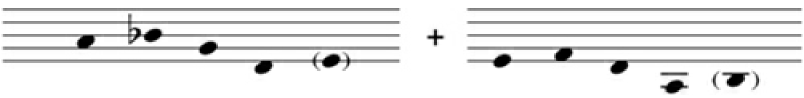
There then follows, under the rubric of a section ostensibly concerned with *jārkāh*, an extremely brief statement relating *ramal, jārkāh* and *zankulā* to transposed *ḥijāzī*. This will be discussed in 5.15.2.

5.11.4 **ṣaʿīdī**

In contrast to *ramal*, the chapter heading for *ṣaʿīdī* includes the generic term *naġam*. Exceptional in form, it presents it not as ‘the *naġam* [called] *ṣaʿīdī*’ but as ‘the *ṣaʿīdī* (“Upper Egyptian”) mode’ (*al-naġam al-ṣaʿīdī*), and it is immediately characterized as a compound (*murakkab*), one made up of two incomplete (*nāqiṣ*) forms of *abū salīk*. They are incomplete by virtue of lacking the two last notes, the finalis *rast* and the preceding *dūkāh*. But it is from this *dūkāh* that the second form, a transposed repetition, begins, cadencing on the *rast* below, by which must be meant not the one immediately below the *dūkāh* but the *rast* below that. The result is:

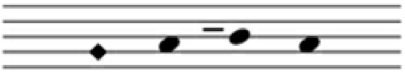
a b♭ g d + e f d A

and Ibn Kurr adds that it consists of two instances of *abū salīk* lacking notes (*buyūt*) of one of them, referring therefore to B and c in the second, since e and f, missing from the first, are supplied by the second. However, in a final comment we are told that sometimes a final *dūkāh* can be added to each part, so that the fuller form is:



5.11.5 zāwilī

All we are told about this mode is that it is *sākāh* finally ending on *dūkāh* . Reference to Šīrāzī's account [119] confirms that this means the note *dūkāh* rather than the mode, thus yielding:



'Finally ending' renders *ba'd nihāyat al-'amal* , which it would be reasonable to construe as recognizing that a composition could exceed these narrow limits, agreeing therefore with Šīrāzī , for whom the three notes specified for *sākāh* constitute no more than a characteristic core. [120]

5.11.6 mubarqa'

The same phrase concludes the immediately following and equally terse parallel definition (there is no separate section heading) of *mubarqa'* as *jārkāh* finally ending on *sākāh* , and again assuming that this means the note *sākāh* rather than the mode, we have two possibilities, either 3- or the addition of $\underline{7}$ -, the *sākāh* below the pitch set defined for *jārkāh* . This would yield:

/1 4 5= 4 5= 4 [7♭ 5 5= 4] 3- 2 1 $\underline{7}$ -/

But later accounts give as its nucleus the equivalent of the two notes 4 and 3-, [121] which suggests that the higher *sākāh* is the more likely. [122] As Ibn Kurr makes no reference to *jārkāh* lacking its final two notes (a and g) the implication is not of a truncated descent, but of the possible use of all the resources of *jārkāh* , whether in the shorter or the amplified form set out in 5.7.3, but with finalis b- in place of g.

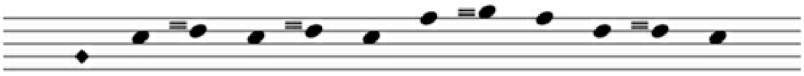
After the final remark about derived (*šawāḏḏ*) and compound (*murakkab*) modes echoing the indications given by others of the existence of an extensive range of further possibilities we arrive at the paragraph that concludes the second *muqaddima* , and with it Ibn Kurr brings the work as a whole to an end. In doing so he briefly draws other threads together by including references both to the introductory section and to the first *muqaddima* . The paragraph begins by saying that no mention has been made of rhythm, there being no need for this when dealing with mode (*'ilm al-naġam*), the topic under discussion in the second *muqaddima* , but goes on to add that since earlier authorities (*salaf*) have reported that it structures (*aqām*) melodies according to *ṯaqīl awwal* and other rhythmic cycles, as has been mentioned (this remark harking back to the justificatory narratives paraded in the introductory defence) he realized that there might be a desire to understand it on the part of those with a noble soul (*al-nafs al-fāḍila*), an expression echoing the phraseology of the initial encomium addressed to the unknown patron. Referring now directly to the discussion of rhythm in the first *muqaddima* , he says that he has therefore dealt with it in a systematic way (*rattabtuh tartīban*) that dispenses with the need for any other. The last remark is conventional, and he concludes, before the obligatory final religious formulae, by repeating it to round off another standard expression: he expresses the hope that this work, despite its modest size, will prove to be a complete treatment of the discipline, rendering any other unnecessary.

5.12 Secondary modes

But if Ibn Kurr's treatise has reached a conclusion, the present discussion of the mode stock has not, for quite apart from the material that had to be postponed for future consideration, there are a few additional entities referred to within the mode sections itemized above.

5.12.1 nikārī

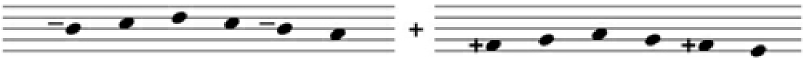
This mode name is cited during the course of the discussion of *jārkāh* (5.7.3) where, after the initial definition, an extra four notes are cited, /7♭ 5 5= 4/, followed by the comment that it is called *nikārī* if 1=′ is included after 7♭ , and there is then a repeat of 7♭ , and then a descent to *jārkāh* (= 4). On the assumption that this implies omission both of 6-, as in the mode *jārkāh* , and of the final descent of *jārkāh* to 1, we have:



It is worth noting that the version supplied by al-Lāḏiqī bears a certain morphological resemblance to the part beginning from the first f′, [123] therefore suggesting that although this segmentation would not be justified by Ibn Kurr's text, the 'extra four notes' might actually represent the onset of *nikārī* .

5.12.2 muḥayyir

At the end of the section on *nayrūz* (5.10.1) it is suggested (*fol. 42v*) that if it is reduplicated (*rakkab 'alā miṯlih*), beginning from the *sākāh* of the *rast* below the initial *sākāh* , it becomes a mode (*naġam*) called *muḥayyir* . This indicates fairly clearly a structure spanning two parallel tetrachords:



5.12.3 muwallad

The exposition of *rahawī* (5.9.3) ends with the comment that it goes well with, amongst others, a mode (*naġam*) called *muwallad* above it, but no description of the structure of such a mode is offered. To be presumed, rather, is that the reference is to a member of the class of derived entities collectively termed *muwalladāt* that are mentioned at the end of the section on *abū salīk* (5.8.6). Although this term does not appear elsewhere, the exploration of structures additional to the stock of named modes is certainly recognized both by al-Urmawī, who speaks of further combinations (*tarkībāt*), and by Ibn Kurr's contemporary, al-Irbilī, for whom the possibilities are, indeed, endless. [124]

5.13 *haftkāh*

Omitted from the above survey, which otherwise follows Ibn Kurr's order, was *haftkāh* (*fols 32v–33r*), the reason being that his account relied upon a reference to another mode that had not yet been described. After the straightforward accounts of *banjkāh* (5.7.4) and *šaškāh* (5.7.5), one might have expected *haftkāh* to follow the logic of its name and simply add a further note above, making seven in all: /4 3- 2 1 $\underline{7}$ - $\underline{6}$ $\underline{5}$ /, but what we are confronted with is a description of it as a *ṣawt* formed by a combination of *ʿuššāq* above *banjkāh*. If *ʿuššāq* were to begin on the highest note of *banjkāh* we would have:

/2 3- 3 3- 3 3- 2 1/ + /2 1 $\underline{7}$ - $\underline{6}$ $\underline{5}$ /

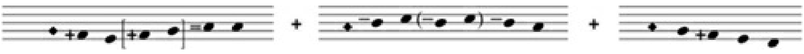
thereby adding 3- and 3 to the five notes of *banjkāh* to arrive at seven (*haft*), but this simple conclusion is not what emerges from the following specifications, which have recourse to transposition with similar results to those already encountered in the discussion of *ʿuššāq* (5.8.8). Indeed, the format is almost the same, with three descending note pairs, and then two further note pairs preceded by an ascent (*irtafaʿ*), but whether stepwise or by a leap is not stated, although inclusion (in brackets) of the intervening notes seems more likely than omission:

original	2	2=	1	(2= | 2)	3-	4
transpositional value	1	$\underline{7}$-	$\underline{6}$	($\underline{7}$- | 1)	2=	2

Evident, here, once again, is the degree of distortion that parallel note-by-note progression can lead to when half notes are dispensed with: it begins already with the third note being a minor third below the first in one version as against a whole tone in the other, and repeats the same difference at the end. The transposed version is also problematic for two further reasons: the formulation of the previous transpositions leads to the conclusion that the original form might have been /2 1 (2) 3- 4/, with 2= an intrusive addition; and irrespective of whether this was the case there is the more fundamental question of the need to proceed via transposition at all, for the notes of the target version could have been itemized directly, without reference to any other. The obvious inference is that we are dealing here with an entity that normally appeared at another pitch level, but it is not named, and none of the other mode definitions match: the only clue we have is the initial reference to a combination of *ʿuššāq* above *banjkāh*, and as the /2 2= 1/ beginning of the original form repeats the initial pitches of *ʿuššāq*, the likelihood is that this first part was construed as a variant or extension of it. Accordingly, we may refrain from deleting the 2= (→$\underline{7}$ -). After it, Ibn Kurr proceeds to say, *ʿuššāq* proper is introduced, and transposition is again invoked. We are told that it begins on 2 (= 1 in *ʿuššāq*), ascends to 4 (= 2 in *ʿuššāq*), and cadences on 1 (= $\underline{6}$ in *ʿuššāq*). The equivalences are thus:

1	2=	2	[2=2	2=	1]	$\underline{6}$
2	3-	4	[3- 4	3-	2]	1

Finally, the cadential *rast* is considered a *banjkāh* (that is, the initial *dūkāh* of the mode *banjkāh*), in relation to which it cadences on the second *rast* below, thus giving a sequence of three elements, in which the initial note of each of the second and third is the finalis of the preceding one:



But this reconstruction can hardly be put forward as secure, and even if correct it is still wholly unclear why Ibn Kurr should have felt compelled to describe it in such a circuitous fashion.

5.14 Inventory

Retaining the *āwāz* class, Ibn Kurr's objections notwithstanding, Figure 5.2 provides an inventory of the mode stock referred to in the *ġāyat al-maṭlūb*, ordered alphabetically by category. The four modes with an asterisk are those that Ibn Kurr says ought to be considered *hank* modes, the implication being that they were not, one of them, indeed, being classed as an *āwāz*, while the other three probably belong in the unclassified group.

In addition to the three main categories, *hank, ṣawt* and *āwāz*, mention also needs to be made of the secondary classes of derived modes that Ibn Kurr refers to, *muwallad, murakkab* and *šawāḏḏ*. Only the first of these is exemplified (if with modes to which no name is given), but the majority of the modes in the *āwāz* group are characterized as either *murakkab* or *šawāḏḏ*. Both *nayrūz* and *kardāniyā* are termed *naġam murakkab*, and the components are mentioned; *šahnāz* is a *naġam šawāḏḏī*; and *kawašt* and *zirkašī* are again *murakkab*, although only in the case of the former is Ibn Kurr explicit: it is a combination of *sākāh* and *iṣbahān*. With *zirkašī* one could toy with the notion that the term *murakkab* might refer to it being an entity with two variant forms: if not, it is difficult to see what the constituent elements were thought to be. With *šahnāz*, on the other hand, there is a clear understanding that it is a derivation from *zīlakand*.

hank	*ṣawt*	*āwāz*
abū salīk	*banjgāh*	**ḥijāzī*
irāq	*buzurk*	*kardāniya*
iṣbahān	*dūkāh*	*kawašt*
māyāh	*haftkāh*	*nayrūz*
nawā	*ḥiṣār al-māyāh*	*salmak*
ra's al-hank	*ḥusaynī*	*šahnāz*
'uššāq	*jārkāh*	*zirkašī*
zīlakand	*rahāwī*	
	ramal	
	sākāh	
	šaškāh	

murakkab	*šawāḏḏ*	unassigned
kardāniyā	*šahnāz*	*ḥiṣār al-iṣbahān al-bastāh*
kawašt		*ḥiṣār al-zīlakand*
nayrūz		*māyāh abī salīk*
zirkašī		*māyāh al-ḥusaynī*
		mubarqa'
		muḥayyir
		nikārī
		ṣa'īdī
		**sāzkarī*
		**'ukbarī*
		**zankulā*
		zāwilī

Figure 5.2 Inventory of modes by category

5.15 Linkages

Also deferred have been the various passages at the end of sections that speak about affinities: the mode in question is said to 'go well' (*ḥasuna*) with another mode or modes. As so many of the definitions consist of only a few notes, it is tempting to see these passages as pointing to familiar combinations, indicating in other words that what Ibn Kurr presents as a named entity might be less something that functioned in isolation than one identifiable element, perhaps the most prominent, within various standard sequences. It is instructive to note in this context that none of his accounts of the *āwāz* modes, with which he associates the term *tarkīb* ('combination'), is followed by such a passage, a contrast that could perhaps be interpreted as pointing to the conventional nature of the pairings to which he does refer. But however close or loose these associations may have been, the particular nature of the relationship between the two (or more) elements in question is sometimes difficult to discern because of uncertainties regarding their position relative to one another.

The first such passage concerns

5.15.1 ra's al-hank

This, we are told in an initial summary,

fol. 29r

goes well with modes beginning (*nataj*) from *rast* notes above, such as *'uššāq*, which begins from above, and *iṣbahān*, which descends to it beginning from the *rast* above, and *iṣbahān* again beginning from the third *rast* above

fol. 29v

and ending on the second. Given that *ra's al-hank* lies between the two *rast* notes d and g, the '*rast* above' may be identified with g, and the 'third *rast* above' with c′ (confirmed by the final statement that the higher *iṣbahān* cadences on 'its second *rast*'), so that we have:

ra's al-hank									g	f+	e	d	e	f+	g
iṣbahān				g	a=	a	a	a=	g	f+	e	d			
	c′	d=′	d′	d′	d′	c′	b-	a	g						

Thus all of the notes of *ra's al-hank* are either included among those in the associated mode, or stand in the consonant relationship of a fourth with them.

The case of *'uššāq* is less clear. When transposed to begin on g there would be some degree of overlap with *ra's al-hank* if f+ or e (the latter by analogy with Ibn Kurr's scheme) were substituted for finalis f and, further, all the notes of *'uššāq* would appear in *iṣbahān*. But the situation is complicated by the following passage, essentially an expansion of the above summary, which concludes with an instruction to perform it above the *rast* of *ra's al-hank*, cadencing onto it,[125] and then to perform *ra's al-hank* itself. If *'uššāq* began on g it would have to discard its finalis in order cadence on g:

'uššāq	g	a=	a	a=	a	a=	g						
ra's al-hank							g	f+	e	d	e	f+	g

and it is difficult to see how the resulting combination would be differentiated from *iṣbahān*. More likely, therefore is that it began on a rather than g. It is true that this appears to contradict the initial statement, but it may be noted that whereas *iṣbahān* – at both pitch levels – is said to begin from a *rast* note, *uššāq* is simply said to begin above, thus leaving open the possibility, despite the previous general reference to beginning from *rast* notes, that in this case the *rast* in question was the finalis rather than the initial. If so, we would have:

'uššāq	a	b-	b	b-	b	b-	a	g						
ra's al-hank								g	f+	e	d	e	f+	g

again with a preponderance of perfect fourth relationships.

The expansion also includes new material, referring, after a re-statement of the lower of the two *iṣbahān* options, to *dūkāh, banjkāh* and *zankulā*. As Ibn Kurr had already made it clear that *zankulā* consists of an ascent using exactly the same notes as *ra's al-hank* it is a little surprising to find a lengthy reiteration here, even if it includes a new comparative element: for a reason that is not stated, although dependent upon the fact that the lowest note of *ra's al-hank* is common to *ra's al-hank* and *zankulā, ra's al-hank* is deemed to be the more powerful (*qawiya 'alā*), so that *zankulā* appears to be lacking in power (*quwwa*). In any event, the introduction of *zankulā* here is straightforward, whereas what is meant by *dūkāh* is problematic, as we are faced with two difficulties. The first concerns the syntax of the passage as a whole, which alternates between two types of relationship. It begins by saying that *ra's al-hank* goes well with (*bi*) modes such as (*miṯl*) *'uššāq* and (*wa-miṯl*) *iṣbahān*; there is then a statement to the effect that performance should be with (*bi*) *iṣbahān* from a given note; this is followed by two references to *dūkāh*, each one introduced by *wa-miṯl*, and the second leading to *banjkāh*; and finally we have a repeat of the earlier 'and with' (*wa-bi*) to introduce *zankulā*. One could thus think that *dūkāh* and *banjkāh* might be parenthetic between *bi-iṣbahān* and *bi-zankulā*, but rather more likely is that they belong to the series begun with *'uššāq* and *iṣbahān*, resuming the first structure after the intercalation of an explanatory comment about *iṣbahān*. This, then, brings us to the second difficulty, the definition of *dūkāh* itself in this context, for on both occasions it is not described as *dūkāh* 'from' (*min*) but as 'the *dūkāh* of' the second *rast* (sc. of *ra's al-hank*), from which one might suspect that it is rather the note that is meant, and in the second case this is reinforced by the *dūkāh* = *banjkāh* equivalence. However, as a member of the first series one would expect the initial reference to *dūkāh* to mean the mode and, indeed, the following phrase speaks of it in terms more appropriate to a mode: it begins/ascends (*šāl*) from g and cadences (*ḥaṭṭ*) onto it. This appears conclusive, yet the characteristics specified are not those of *dūkāh* when described separately (5.7.1), for although both versions begin from a *rast* note, they have *dūkāh* as finalis. It is difficult to avoid the suspicion that the passage might be less than wholly trustworthy, and one might even wish to attempt to construe it as relating to *iṣbahān* transposed to a and cadencing variously on a or d, but even if that is rejected as too hazardous an interpretation – the latter would in any case overlap with the combination of *'uššāq* from a and *ra's al-hank* – it is clear that the various modes involved, as before, either inhabit much the same territory or are linked by perfect fourth relationships. Placing in square brackets the addition to *dūkāh* required to make it conform to the text, we have:

ra's al-hank												g	f+	e	d	e	f+ g
iṣbahān							g	a=	a	a	a=	g	f+	e	d		
dūkāh	a)						g			a	a=	(g)	f+	e			(f+ g)
	b)	g	a	b-	c′	d′	d=′	c′	b-	a		[g]					
banjkāh										a		g	f+	e	d		
zankulā															d	e	f+ g

5.15.2 dūkāh, sākāh, jārkāh, banjkāh, šaškāh

The next such passage occurs at the end of the section on *dūkāh* (5.7.1).

fol. 30r

It is said to go well with *iṣfahān*, descending onto it, and with *zirkašī* and the reversed form of *abū salīk* (that is, the other form of *zirkašī*), these two beginning from the third *rast* above that of *dūkāh* and cadencing onto (the note) *dūkāh*. If we again assume the third *rast* to be f′, and omit the initial a of *zirkašī*, we will have:

dūkāh a)	g	a	a=	(g)	f+	e		(f+g)	a			
dūkāh b)	g	a	b-	c′			d′	d=′	c′	b-	a	
iṣbahān				c′	d=′	d′	d′	d=′	c′	b-	a	g
zirkašī				f′			d′	d=′	c′	b-	a	
reversed *abū salīk*				f′	g♭′	f′	d′	d=′	c′		a	

Here, similarly, there is an emphasis on overlapping structures, with *dūkāh* (b) evidently the form that matches the others more closely, yielding a shared core tetrachord, a (b-) c′ d=′ d′, and in the case of *iṣbahān* complete identity in the pitches used.

The passage continues with the statement, cited in 5.8.6, that theoretically allows *abū salīk* to be performed from any *dūkāh* of the four *rast* notes (presumably e, a, d′ and g′),
fol. 30v
but restricting it essentially to a. It then proceeds to restrict *māyāh*, using the same phrasing, to beginning on d′, adding that this is its pitch position (*ʻuluww*) and that it is inconceivable for it to occur elsewhere. This, Ibn Kurr adds in conclusion, in another of his ripostes to Persian views, demonstrates that the derivation of *māyāh* and *abū salīk* from *ʻirāq* is erroneous.

With regard to *sākāh*, other modes are introduced immediately after the initial nuclear definition, /1 2 3-/. The first remark states that when one descends to the initial 1, making it the finalis, the mode becomes *ḥusaynī*, and one mixes (*ḫālaṭ*) it with *iṣbahān* beginning from the *rast* above and cadencing on its 'house' (*bayt*), which presumably refers here not to 3-, the characteristic note of *sākāh*, but to 1, especially as Ibn Kurr adds that if one then wishes to extend the descent further, to 7̲ -, it will be mixed with *iṣbahān* and end (*ḥaṭṭ*) on *ḥijāzī*. Taking *iṣbahān* in one of the positions discussed above we will have *sākāh* from g, which also fits the suggestion made in 5.9.4.2 that this was also a possible position for *ḥusaynī*:

sākāh							b-	a	g						
ḥusaynī			g	a	b-	c′	b-	a	g	f+ e	d	e	f+ g	f+ e	
iṣbahān	c′	d=′	d′	d′	d=′	c′	b-	a	g						
ḥijāzī							b-	a	g	f+					

We are then told that when *sākāh* remains just itself, unmixed with *iṣbahān*, and ascends,
fol. 31r
there are other possible connections with unspecified modes above, and with a form of *ḥiṣār al-iṣbahān* lacking certain notes (*nāqiṣ*) called *al-bastāh*. This mode, discussed in 5.8.4.2, appears in any case to be a transposition of *sākāh* to a higher register.

A further lengthy passage deals with the modal associations of *jārkāh*. It is said, first,
fol. 31b
to go well with *ḥijāzī* above, transposed. The upper *rast*, 4, the 'house' of *jārkāh*, is treated as a lower *rast*, 1, in relation to which we have a customary series of note-by-note pairings that disregard any possible intervallic mismatches:

original	7̲-	1	2=	2	3-
transposed	1	2=	2	3-	4

Ignoring the intrusive *ramal*, which does not form part of *ḥijāzī*, this yields /1 2= 3- 4/, which in relation to the higher *rast* becomes /4 5= 6- 7♭/. Ibn Kurr then adds that this *ḥijāzī* occurs above *zankulā*, and warns against turning *jārkāh* into *zankulā*, spelling out the differences in detail: *jārkāh* begins /1 4/, *zankulā* /1 2 3- 4/ and,
fol. 32r
further, 5= belongs to (*min ḥuqūq*) *jārkāh*, not *zankulā*. The two are, he says finally, similar but different, and since the previous listing of features clearly contrasts them this suggests that the differences between them were being eroded, a conclusion reinforced by the mention of 5=, which only makes sense if it were occasionally being added to *zankulā*, despite not forming part of his definition of it. The point is also of some interest in that the extension of *zankulā* to include 5= would bring it somewhat closer to the Systematist version.

There is, in addition, a short section on *jārkāh* (*fol. 46r*) inserted after that on the *ramal* mode (5.11.3), its otherwise anomalous position being explained by the fact that it also refers to *ramal*, continuing, indeed, the final mention in that section of its compatibility with *ḥijāzī* transposed above, as before – presumably a reference to the transposition discussed in relation to *jārkāh*. It states that this transposed *ḥijāzī* is something that goes well with *ramal, jārkāh* and *zankulā* – in other words, it merely repeats the associations presented in the main section, and adds to them *ramal*.

Taking 1 as g in *jārkāh* and *zankulā*, and as c′ in *ramal*, the relationships between these modes may be stated as:

jārkāh	g			c′	d=′	d=′	c′		[f′	d′	d=′	c′]	b-	a	g
ḥijāzī				c′	d=′		e-′	f′	[f′]	e-′	d=’	c′			
zankulā	g	a	b-	c′											
ramal				c′	d=′	d=′	c′						b-	a	

There is thus complete overlap between *ramal* and *jārkāh*, while the other two serve the function of filling the gaps between the main notes, g, c′ and f′. If *zankulā* remains in its more normal position from d, we will have:

ḥijāzī			g	a=	b-	c′	[c′]	b-	a=	g
zankulā	d	e	g							

with, as before, just one pair of notes not forming a perfect fourth.

Of *banjkāh* it is said only that it goes well with *ḥijāzī*, and the point is repeated in the section on *šaškāh*,
fol. 32v
where the position of *ḥijāzī* in relation to both is spelled out. It is higher and, again, transposed, so that if d′ is taken as the upper note of *banjkāh* we will have:

original		e-′	f′	g=′	g′	a-′
transposed	d′	e-′	f′	g=′	g′	

Excluding the intrusive *ramal* note in the original, g=′, the relationship between the three modes can thus be stated as:

banjkāh								d′	c′	b-	a	g
šaškāh							e-′	d′	c′	b-	a	g
ḥijāzī	d′	e-′	g=′	g′	[g′]	g=′	e-′	d′				

5.15.3 ‘irāq, zīlakand, iṣbahān, māyāh

For *‘irāq* a number of associations are mentioned. We are told, first,
fol. 33v
that it descends upon *ḥijāzī*, the lowest note of which is c+ if *‘irāq* begins from g:

‘irāq	g	f+	e	g	f+	e			f+	g	a
ḥijāzī					f+	e	d	c+			

but there is no indication as to whether this meant that there was a transition to *ḥijāzī* after the conclusion of *‘irāq* or, perhaps more likely, that the term *ḥijāzī* provided a convenient label to identify a downwards extension of the range as part of the development of *‘irāq*.

We are then informed that it goes well with *māyāh* from d′ descending onto *abū salīk* from a; with *zirkašī* and reversed (*mun‘akis fī waḍ‘ih*) *abū salīk* (that is, the second form of *zirkašī*); with *zīlakand* above, since *zīlakand* begins from the highest note of *‘irāq*; and with other unspecified higher modes (*‘uluwwāt*) above up to the top register (*āḫir al-ṭabaqa*).

In the first case it is clear that *māyāh* precedes *abū salīk*, but the position of *‘irāq* in the sequence is not specified, although it would make sense for it to be introduced last, revisiting and filling in the g – e gap in the latter part of *abū salīk*. Also to be noted is the octave from the beginning of *māyāh* to the end of *abū salīk*, and that the first note of *abū salīk* is at the same time the finalis of *‘irāq*:

māyāh	**d′**	c′												
abū salīk			a	b♭	g	d	e	d						
‘irāq					g	f+	e		g	f+	e	f+	g	a

With the two forms of *zirkašī* we again have a shared finalis, but there is no indication of a sequence of events, although given that the finalis of *‘irāq* is also the initial of *zirkašī* it may be conjectured that *zirkašī* normally followed:

‘irāq	g	f+	e	g	f+	e	f+	g	a						
zirkašī									a	f′		d′	d=′c′	b-	a
									a	f′	g♭′f′	d′	d=′c′		a

In relation to *zīlakand* Ibn Kurr comments that its first note is the highest of *‘irāq*, which suggests that in this case too it is more likely that it followed:

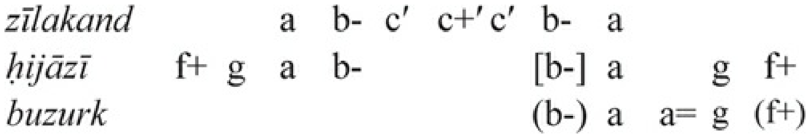
‘irāq	g	f+	e	g	f+	e	f+	g	a				
zīlakand									a	b-	c′	c+′	b-	a

However, when we turn to *zīlakand* itself, we are told

fol. 34r

that it descends or cadences (*ḥaṭṭ*) onto *ʿirāq* just as *ʿirāq* rises up (*šāl*) to it, indicating fairly clearly that the progression could be in either direction. In addition, *zīlakand* is said to go well with *ḥiṣār* above; to descend or cadence onto *ḥijāzī* (because *buzurk* is concealed [*kāmin*] beneath it); and to descend or cadence onto *buzurk* when *ḥijāzī* rises away (*irtafaʿ*) from it.

In this context *ḥiṣār* may safely be assumed to be shorthand for *ḥiṣār al-zīlakand*, discussed in 5.8.4.1, and a relationship between it and *zīlakand* may already be implied in the definition of *ḥiṣār al-zīlakand*. A more explicit repetition appears in the remark relating *buzurk* to *ḥijāzī*, which simply reiterates the beginning of the definition discussed in 5.9.2. Given that the relative positions of *zīlakand* and *ḥijāzī* are indicated, we will have:



zīlakand			a	b-	c′	c+′c′	b-	a			
ḥijāzī	f+	g	a	b-			[b-]	a		g	f+
buzurk							(b-)	a	a=	g	(f+)

Concerning *iṣbahān* we are merely told

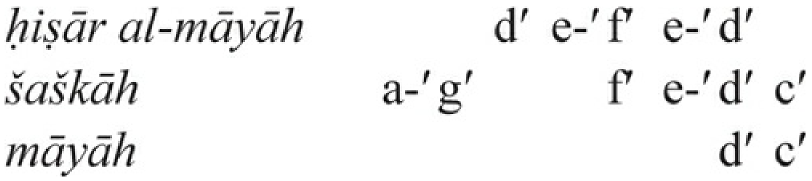
fol. 35r

that it goes well with *ḥiṣār* above, with a cross-reference to the later description of, presumably, *ḥiṣār al-iṣbahān al-bastāh* (5.8.4.2).

Ibn Kurr's comments on *māyāh* are also brief, but rather more informative:

fol. 36v

in addition to *ḥiṣār*, that is, *ḥiṣār al-māyāh*, it goes well with *šaškāh* above, and it descends to *abū salīk* and *ʿirāq* below. If we assume that in this context the finalis of *šaškāh* was c′, we will have with the modes above:



ḥiṣār al-māyāh		d′	e-′	f′	e-′	d′	
šaškāh	a-′g′			f′	e-′	d′	c′
māyāh						d′	c′

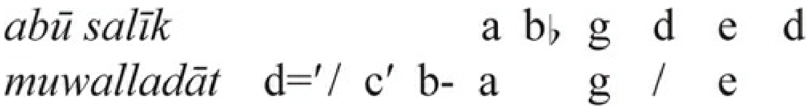
while with the modes below we have a repetition of the set already presented in relation to *ʿirāq*. What is not stated is whether we are dealing here with conventional pairings or with larger sequences. It might be thought that the sequence *māyāh* → *abū salīk* → *ʿirāq* would be more likely than just *māyāh* → *ʿirāq*, but *ḥiṣār al-māyāh* → *māyāh* and *šaškāh* → *māyāh* appear just as plausible as, say, *šaškāh* → *ḥiṣār al-māyāh* → *māyāh*. Also conceivable is that the sequence was extended to include modes both above and below *māyāh*.

5.15.4 **abū salīk, nawā, ʿuššāq**

The exposition of *abū salīk* is followed

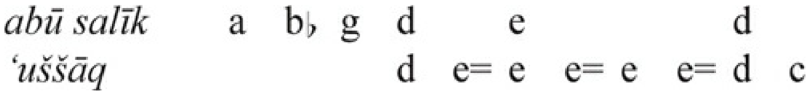
fol. 37r

by a series of references before which the usual 'goes well with' needs to be supplied. [126] The first partner modes to be cited are its off-shoots (*muwalladāt*), which follow it, presumably beginning from or near the finalis d. [127] We are not told what they are, but those mentioned in relation to both *nawā* and *abū salīk* and presented in 5.8.7 are obvious candidates, and if their pitch ranges are collapsed we would have:



abū salīk				a	b♭	g	d	e	d
muwalladāt	d=′/	c′	b-	a		g	/	e	

with a persuasive degree of overlap, to which may be added that the finalis of the most extended example coincides with the initial of *abū salīk*. Ibn Kurr next mentions *māyāh* above, and finally *ʿuššāq* transposed and beginning from the finalis of *abū salīk*. [128] The combination with *māyāh* above may well be no more than a repeat of that discussed in 5.15.3 in relation to *ʿirāq*. As for *ʿuššāq*, transposition to d will yield:

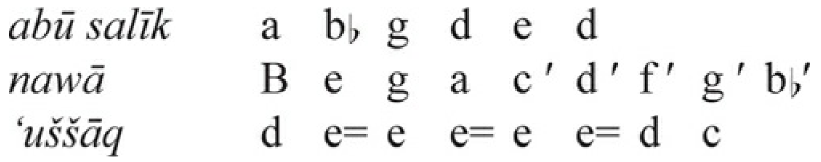


abū salīk	a	b♭	g	d		e				d	
ʿuššāq				d	e=	e	e=	e	e=	d	c

A further mention of *ʿuššāq* comes in the length entry on *nawā*,

fol. 37v

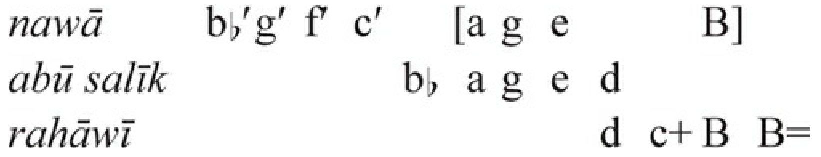
and here it is specified that the initial is again d, defined as the finalis of *abū salīk*. In effect, *nawā* is described as one of a sequence made up of precisely these three modes: it is to come after *abū salīk* reaches its finalis, while *ʿuššāq* comes after *nawā* reaches its highest note:



abū salīk	a	b♭	g	d	e	d			
nawā	B	e	g	a	c′	d′	f′	g′	b♭′
‘uššāq	d	e=	e	e=	e	e=	d	c	

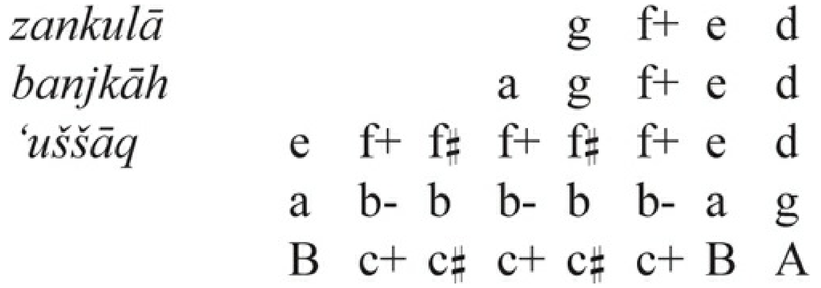
As in the following section on *‘uššā q* , the very unusual jump from b♭ ′ to d is described as the *jawā b* of its *jawā b* , referring to the successive double fourths, d – c′ and c′ – b♭ ′.

The following comments pursue the relationship between *abū salī k* and *nawā* , speaking of the creation of further modal entities (*anġā m*) from them, that is, the *muwalladā t* discussed in 5.8.7, and the section ends with the cryptic remark that sometimes some notes of *nawā* are performed, with a descent on some notes of *abū salī k* – but without including a *sā kā h* or *ramal* note – continuing down to *rahā wī* . This repeated emphasis on the absence of *sā kā h* or *ramal* notes is possibly to be attributed to the contrast with *rahā wī* , which contains both. Without knowing precisely which notes of *nawā* and *abū salī k* were intended, the nature of this sequence is unclear, but a reasonable guess, given the degree of overlap between them, would be that the emphasis in *nawā* would have been on the higher register, and assuming that the notes of *abū salī k* included the finalis, it would make sense to think that *rahā wī* would continue the descent, beginning from d:



nawā	b♭′	g′	f′	c′		[a	g	e			B]	
abū salīk					b♭	a	g	e	d			
rahāwī									d	c+	B	B=

The discussion of the pleasing modal combinations with *‘uššā q* (*fol. 39a*) involves, unusually, a condition:
fol. 39r
if it begins from *dū kā h* and is not performed immediately after *abū salī k* , then it goes well with *‘uššā q* from the *dū gā h* above and from the *dū gā h* below; with *zankulā* between the *rast* above and the *rast* below the *dū gā h* it started from; and with *banjkā h* from the *dū gā h* of the *rast* above its *rast* and ending on its *rast* . These relationships are quite straightforward:

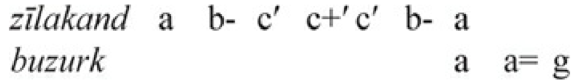


zankulā					g	f+	e	d
banjkāh				a	g	f+	e	d
‘uššāq	e	f+	f♯	f+	f♯	f+	e	d
	a	b-	b	b-	b	b-	a	g
	B	c+	c♯	c+	c♯	c+	B	A

and show on the one hand, as in several of the sequences discussed above, a predilection for an area of overlap, here d e f+, and on the other a preference for parallelism at the fourth. However, the section still has a slight sting in its tail, for the final remark is to the effect that this mode [129] (*naġ am*) is performed after *abū salī k* from some of its notes, transposed – but without telling us which ones. Assuming them to be initial, four remain after excluding the already used d, of which g and a would appear to be the most likely candidates.

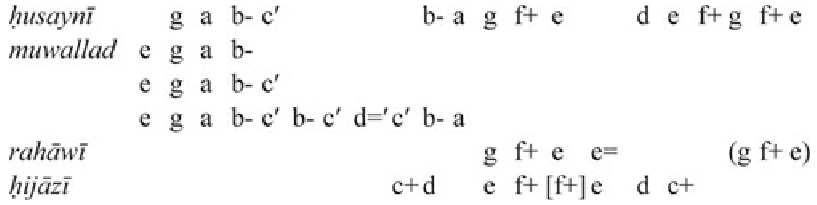
5.15.5 buzurk, rahā wī , sā zkarī , ramal

Just one relationship is indicated for *buzurk* ,
fol. 40r
that it goes well with *zī lakand* , which descends onto it when *ḥ ijā zī* rises up (*irtafa‘*) from it or, differently put, is peeled away to leave only the basic form /2 2= 1/, so that we have:



zīlakand	a	b-	c′	c+′	c′	b-	a		
buzurk							a	a=	g

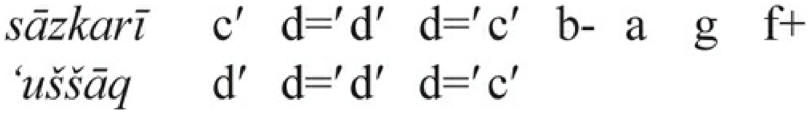
With *rahā wī* matters are a little more complex. It is said to go well with *ḥ ijā zī* below, with *ḥ usaynī* above, and with a mode called *muwallad* above (the point being emphasized by the apparently needless addition that *muwallad* goes well with *rā hawī* below). If we assume that the *muwallad* referred to is once again one of those mentioned in the section on *nawā* (5.8.7), and assign initial g to *rā hawī* , we arrive at the following conjectural set of relationships:



ḥusaynī		g	a	b-	c′					b-	a	g	f+	e		d	e	f+	g	f+	e
muwallad	e	g	a	b-																	
	e	g	a	b-	c′																
	e	g	a	b-	c′	b-	c′	d=′	c′	b-	a										
rahāwī												g	f+	e	e=				(g	f+	e)
ḥijāzī									c+	d		e	f+	[f+]	e	d	c+				

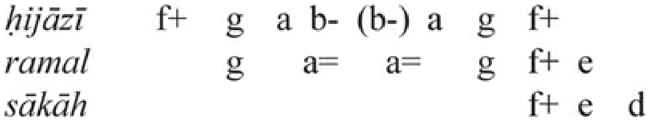
fol.46r

The one mode mentioned in relation to *sāzkarī* is *ʿuššāq*, but lacking its beginning and finalis and, again, transposed. Its initial is the *dūkāh* which is the highest note of *sāzkarī* (d′), and the other notes mentioned are d=′ and c′. Omitting the finalis from the original form of *ʿuššāq*, together with the first two rising notes, we are left with only d′ d=′ d′ d=′ c′, which raises the question why it was felt appropriate to identify this as a separate mode at all, given the extent of overlap:



sāzkarī	c′	d=′	d′	d=′	c′	b-	a	g	f+
ʿuššāq	d′	d=′	d′	d=′	c′				

The final mode mentioned as ‘going well’ with others is *ramal*, those associated with it being *sākāh* and *ḥijāzī*. Again, their positions in relation to each other are not spelled out, except insofar as we are told that *ḥijāzī* is above, transposed, as before – presumably a reference to the identification in the preceding section on *sāzkarī* of the highest note of *ḥijāzī* being b-. On that basis the following may be suggested, if hardly with confidence, as at least a plausible arrangement:



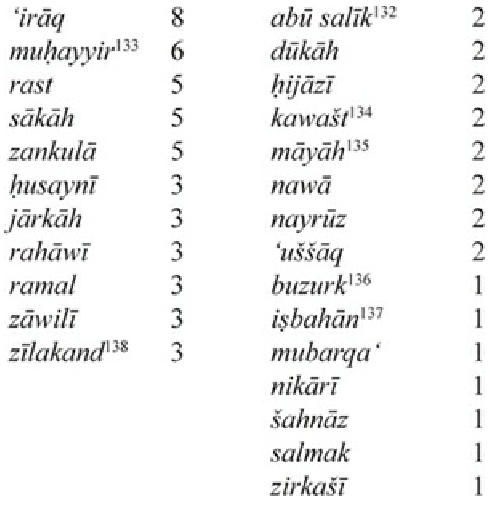
ḥijāzī	f+	g	a	b-	(b-)	a	g	f+		
ramal		g		a=	a=		g	f+	e	
sākāh								f+	e	d

5.16 Conspectus

On that slightly tentative note the survey of the text of the second *muqaddima* comes to an end. That the information to hand in this final instance did not allow greater certainty may be a matter of regret, but hardly came as a surprise, given the number of interpretative problems that have been encountered along the way: in short, all the pieces of the jigsaw have now been held up for inspection, but some do not seem to fit too well, and a few may be damaged, so that even if the major outlines of the puzzle can be discerned obscure patches remain, their parts difficult to assemble. It is these that have necessitated such a detailed examination of the text, while the dogged item-by-item approach has had the inevitable drawback of impeding rather than facilitating comprehension of the wider picture. But equally apparent from the various hesitations as to the precise meaning of some of Ibn Kurr’s definitions is that any attempt to discern an overall pattern underlying the range of modes he acknowledges or, failing that, then at least local regularities, is likely to be fraught with difficulty. By no means clear, indeed, is the extent to which the various modes, whether individually or in combination, do or do not cohere into something that we might think of as a system governed by particular regularities rather than being no more than a random accretion of disparate entities. This is, nevertheless, a topic that needs to be grappled with, and in doing so it is worth being mindful, yet again, of the contrast between the approaches of Ibn Kurr and the Systematist theorists, with whom we note the temptation for the theoretical armature to encourage an analytical approach that seeks uniformity of presentation, with the result that whenever possible, and also on occasion when not really possible, modes appear as an octave scale divisible into tetrachord (below) + pentachord, a regimented regularity against which those instances where a particular modal configuration cannot be so accommodated stand out. As Šīrāzī’s account demonstrates, descriptive accuracy is still possible, but the bias in the tradition as a whole in favour of a standard theoretically grounded format is clear. With Ibn Kurr, in contrast, there is no evidence of an analogous bias: no attempt is made to hypothesize entities such as tetrachords and pentachords that might serve as structural straitjackets; no effort is made to present modes arbitrarily from the same pitch; the distinction drawn between full and half notes has the air of being common coinage among performers rather than the fruit of excogitation; and the descriptions of the individual modes are resolutely empirical in character, sometimes puzzlingly awkward, especially when transposition is involved (or invoked), but sometimes disarmingly simple and small scale.

Such cases bring their own problems, however. The most obvious is that of sustainability, the extent to which we are meant to understand the entities so defined as adequate tools for the creation of melodic material of any substance, as against being readily identifiable but relatively brief segments within a melody conventionally stitched together from a number of such small elements. In favour of the former view one might cite the habit of describing a song as being in mode *x*, which presumes, despite the possible presence of modulatory sections, that mode *x* would account, if not for all, then at least for a significant proportion of the whole. Yet how, to take the most striking example, are we to understand what is implied by such a minimal entity as *māyāh*, defined as consisting of just two notes? That a song could be labelled as in *māyāh* is confirmed by al-ʿUmarī,[130] but although the two notes are clearly profiled in terms of register, order and relative prominence, and therefore readily identifiable, it is difficult to conceive of them in isolation as an adequate vehicle for composition, which suggests either that in his definition Ibn Kurr has in this case (and therefore quite possibly also in others) selected out what he considers to be the most significant or readily recognizable element from within a larger structure, or that the two notes in question could be isolated, perhaps when initial, as a feature sufficiently characteristic to warrant the song as a whole being labelled accordingly, despite containing a greater proportion of material from other modes. These alternatives are, though, less opposites than different perspectives: both accept that a composition purportedly in *māyāh* was likely to have used richer melodic resources than those in the definition, but while one assumes the extraction by Ibn Kurr of a representative element from a more extended entity to which the same name would be applied, the other assumes the singling out of one among a sequence of elements to each of which the tradition gave a name. However, taking the generality of mode descriptions into account, including the various sequences that he singles out, there is little to support the view that Ibn Kurr was indulging in a personal form of reductive analysis: rather more likely is that the atomistic representation of *māyāh* he gives us reflects the type of analytical segmentation familiar to practitioners. If so, their reification of small-scale entities suggests that they would have been quite familiar with the association between various names and various tetrachords, but perhaps less so with the extension of these to octave scales promoted by al-Urmawī – which if anything renders somewhat problematic the very success of this larger-scale theoretical account.

In addition to mentioning songs labelled as in *māyāh* , al-ʻUmarī refers to many of the other modes listed by Ibn Kurr when presenting near contemporary repertoire, particularly songs attributed to al-Urmawī and al-Tawrīzī . Although not sufficiently extensive to give a reliable modal popularity poll, some indications of relative frequency of occurrence may nevertheless be gained from the list in Figure 5.3 . It is striking to find, for example, that the first five modes, accounting between them for 40 per cent of the whole sample, are all defined in terms of main notes only; that five of the first 11 are not members of the prestigious *šadd* group, of which two appear only once; and that not one of the 11 is a member of the *āwāz* group, pointing, therefore, to the importance of certain modes that a reading of the theoretical literature would suggest are marginal, while in contrast some of those that appear to be central occur much less frequently. As these songs purportedly represent an imported repertoire it is, though, hardly surprising to find that there is no instance of some of the modes that are mentioned only by Ibn Kurr (*šaškāh, haftkāh, ṣa‘īdī, sāzkarī* and *‘ukbarī* , as well as the various combinations involving *ḥiṣār*), whereas there is one of *‘uzzāl* , a mode he does not list. However, they do include three examples of *ramal* , a mode ignored by the Systematists, and a salutary reminder that misattribution, whether inadvertent or deliberate, may have allowed some local compositions to creep in. [131]



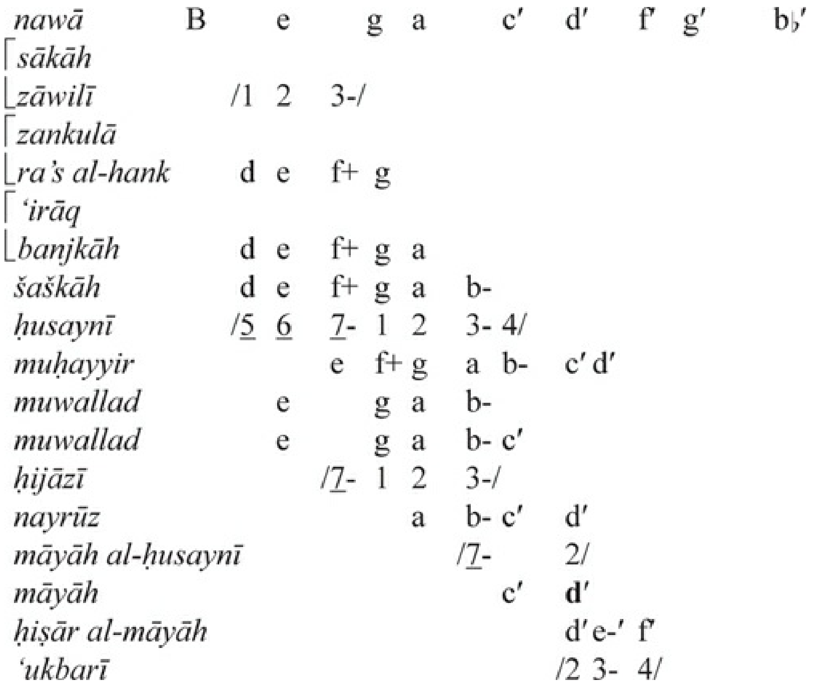
‘irāq	8	*abū salīk*[132]	2
muḥayyir[133]	6	*dūkāh*	2
rast	5	*ḥijāzī*	2
sākāh	5	*kawašt*[134]	2
zankulā	5	*māyāh*[135]	2
ḥusaynī	3	*nawā*	2
jārkāh	3	*nayrūz*	2
rahāwī	3	*‘uššāq*	2
ramal	3	*buzurk*[136]	1
zāwilī	3	*iṣbahān*[137]	1
zīlakand[138]	3	*mubarqa‘*	1
		nikārī	1
		šahnāz	1
		salmak	1
		zirkašī	1

Figure 5.3 Incidence of modes in songs cited by al-ʻUmarī

In considering now the whole corpus of definitions that the *ġāyat al-maṭlūb* presents it would seem sensible to look first for major internal groupings or divisions, rather than simply to regard it as an undifferentiated mass. Various criteria might be proposed, but one fairly obvious one would be to apply the hierarchical distinction that Ibn Kurr himself draws between the *rast – dūkāh – sākāh* notes, *ramal* , and the half notes. We may therefore begin with what might be termed the modes with main notes, those containing only *rast, dūkāh* and *sākāh* .

5.16.1 Main note scales

The first parameter to be considered is, quite simply, the notes used. The presentation of each mode in what follows as an ascending series is arbitrary and should be read as a wholly neutral statement of the note stock. Further, in producing a first format suitable for comparative purposes the order in which Ibn Kurr introduces the modes has been ignored; and all his indications of melodic contour or note repetitions have been omitted, the result being that various modal specifics are smudged. Those modes that are represented numerically, thus with no conclusive assignment to a particular pitch position, have been placed in Figure 5.4 as if 1 = g or, where there is some indication that they would normally appear in a higher register, as if 1 = c′. The fact that in the former case they might have been performed with 1 = d or c′ is, in the present context, unimportant, since it merely substitutes, in relation to the proximate others, a fourth relationship for a unison.



nawā	B		e		g	a		c′	d′		f′	g′	b♭′
⌈*sākāh*													
⌊*zāwilī*		/1	2	3-/									
⌈*zankulā*													
⌊*ra's al-hank*		d	e	f+	g								
⌈*'irāq*													
⌊*banjkāh*		d	e	f+	g	a							
šaškāh		d	e	f+	g	a	b-						
ḥusaynī		/5	6	7-	1	2	3-	4/					
muḥayyir				e	f+	g	a	b-	c′	d′			
muwallad			e		g	a	b-						
muwallad			e		g	a	b-	c′					
ḥijāzī				/7-	1	2	3-/						
nayrūz						a	b-	c′	d′				
māyāh al-ḥusaynī							/7-		2/				
māyāh								c′	**d′**				
ḥiṣār al-māyāh									d′	e-′	f′		
'ukbarī									/2	3-	4/		

Figure 5.4 Modes using only main notes

As Figure 5.4 shows, despite the high degree of overlap and, in many cases, the low number of pitches used, there are fewer cases than might have been anticipated in which additional features would be required to differentiate one mode from another. It has been suggested that *'ukbarī* was probably not used from d′, and hence was probably distinguished from *ḥiṣār al-māyāh* by register, thus leaving just three pairs of modes to use, ostensibly, exactly the same set of pitches – *zankulā* and *ra's al-hank, 'irāq* and *banjkāh*, and *sākāh* and *zāwilī* – and with the first pair the possibility cannot be discounted of there being an additional pitch in *zankulā* to provide further contrast beyond that already established by melodic contour. With *'irāq* and *banjkāh* there are, again, markedly different melodic contours, while with *sākāh* and *zāwilī* separate identity is again assured by modal features (rather than by registral differentiation). For *sākāh* the logic of the name series would suggest, in relation to *banjkāh* and *šaškāh*, that the normal position would be that given here, 1 = d, but if credence is given to the evolutionary account provided by Šīrāzī preference would go, in relation to a putative extension upwards of *ra's al-hank*, to 1 = g in all three cases. Be that as it may, both authors have *sākāh* and *zāwilī* using the same pitch set, but ending on a different finalis. Disposed as they are, perhaps the most striking feature of this group is the block from *sākāh* to *ḥusaynī*, all with d as the lowest note and with a successive increase from three to seven in the number of notes used. Otherwise it is more a case of observing the exceptional and apparently anomalous. Extraordinary and quite atypical, for example, is *nawā*, its great range and gapped scale being in marked contrast to everything else. Also to be noted is that although several modes have *rast* 2 (= d) or *dūkāh* 2 (= e) as the lowest note, none have *rast* 3 (= g) or *dūkāh* 3 (= a); that *ḥijāzī* and *māyāh al-ḥusaynī* are the only modes to have as their lowest a *sākāh* note; and that for the four final high register modes the definitions given comprise only two or three notes. As *māyāh* is the only one of these to figure among the compositions recorded by al-'Umarī, it may be conjectured that the others were restricted to providing conventional modulatory passages during the high register section of a composition, much like, to use a contemporary analogy, certain *qiṭaʻ* in the Iraqi *maqām* repertoire.

5.16.2 Main notes + ramal scales

Of exactly the same size is the group of modes that also make use of a *ramal* note. In Figure 5.5 the modes that have been represented numerically, in this case the majority, are all expressed as if 1 = g.

Here we have only one pair, *iṣbahān* and *kawašt*, where the pitch set is the same, and they are again distinguished by their markedly different melodic contours. As noted before, the central pair of *ramal* notes, a= and d=′, do not co-occur, and there are just two instances of *ramal* notes in contiguous tetrachords, d=′ and g=′ and 5= and 1=′, the second also presumably in the upper register, and just one, *kardāniyā*, in which we encounter a *ramal* note in the low register (e=) and another in the high (d=′). A particularly marked feature is that there are no fewer than 14 instances of the *ramal* note not replacing *dūkāh* but being additional to it, thus creating greater density (as measured by the number of pitches used within a given range). In addition, it may be noted that in the great majority of cases where we encounter /1 2= 2/ or /4 5= 5/, there is either no continuation upwards or, in the latter case, a jump to 7♭.

haftkāh	/$\underline{5}$	$\underline{6}$	$\underline{7}$-	1	2=	2	3-	4/							
kardāniyā	/$\underline{6}$=	$\underline{6}$	$\underline{7}$-	1		2	3-	4	5=/						
ramal		/$\underline{6}$	$\underline{7}$-	1	2=/										
dūkāh		/$\underline{6}$	$\underline{7}$-	1	2=	2/									
muwallad		e		g		a	b-	c′	d=′						
sāzkarī			f+	g		a	b-	c′	d=′	d′					
buzurk			/($\underline{7}$-)	1	2=	2	(3-)/								
⌈*iṣbahān*				g		a	b-	c′	d=′	d′					
⌊*kawašt*															
dūkāh				/(1)		2	3-	4	5=	5/					
jārkāh				/1		2	3-	4	5=	5		7♭/			
mubarqa‘				/1			3-	4	5=	5		7♭/			
nikārī				/1				4	5=	5		7♭	1=′/		
dūkāh				(g)		a	b-	c′	d=′	d′					
rahāwī					/2=	2	3-	4/							
zirkašī						a	b-	c’	d=’	d’		f’			
al-iṣbahān al-bastāh							b-	c’	d=’	d’					
ḥiṣār al-iṣbahān al-bastāh							b-	c’	d=’	d’	e-’	f’	g=’	g’	a-’

Figure 5.5 Modes using only main and *ramal* notes

It was only to be expected that there would be cases in which the pitches used in a mode that includes *ramal* otherwise coincide with those of one that does not. They comprise *haftkāh* and *ḥusaynī; dūkāh* and *nayrūz; buzurk* and *ḥijāzī*; and the double pairs *iṣbahān/kawašt* and *‘irāq/banjkāh* . Although all of them are ultimately differentiated by melodic direction and movement, and possibly also by register, which in some is not specified, there are also unexpected commonalities. With *haftkāh* and *ḥusaynī*, for example, the central sections appear virtually identical:

haftkāh	…	1]	2=	2	3-	4	(3-	4)	3-	2	1	$\underline{7}$-	$\underline{6}$	$\underline{5}$/	
ḥusaynī		/1			3-	4			3-	2	1	$\underline{7}$-	$\underline{6}$	$\underline{5}$	…

dūkāh and nayrūz have the same contour:

dūkāh				/4	5	5=	(4)	3-	2	(3-	4)	5/
	/1	2	3-	4	5	5=	4	3-	2/			
nayrūz			b-	c′	d′	c′	b-	a				

and *buzurk* and *ḥijāzī* overlap:

buzurk	/(3-)	2	2=	1	($\underline{7}$-)/
ḥijāzī	/ 3-	2		1	$\underline{7}$-/

The definitions of the remainder are, though, more heterogeneous, the only common element appearing to be the descent shared by *banjkāh* and the latter part of *iṣbahān* :

banjkāh				/2		1	$\underline{7}$-	$\underline{6}$	$\underline{5}$/
iṣbahān	c′	d=′	d′	d′	d=′	c′	b-	a	g

In addition, there are cases in which a *ramal* note is an extension beyond the pitch set of a main-note mode rather than an insertion within:

muwallad	e	g	a	b-	c′	
muwallad	e	g	a	b-	c′	d=′

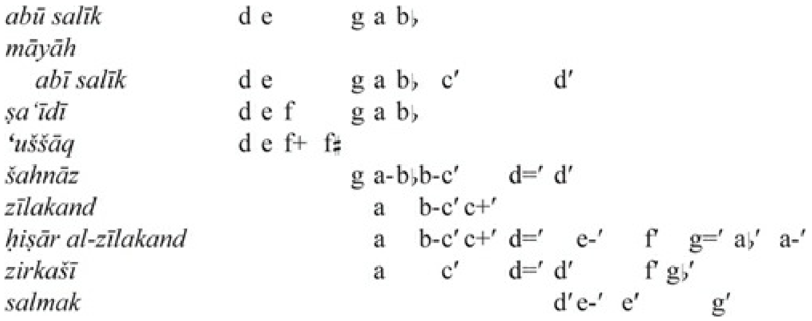
‘ukbarī	/2		3-	4/
rahāwī	/2=	2	3-	4/

muḥayyir		/$\underline{6}$	$\underline{7}$-	1	2	3-	4/	
kardāniyā	/$\underline{6}$=	$\underline{6}$	$\underline{7}$-	1	2	3-	4	5=/

Despite these real or apparent congruities, there are a number of significant respects in which the two groups can be seen to be dissimilar. One might not have expected, for example, much difference in the range average, but in fact the second group contains seven modes with a range of a minor seventh as against only two (apart from the extraordinary *nawā*) in the first, and it contains no more than one (the nuclear rather than the extended form of *buzurk*) with a range in the whole tone to neutral third zone that is inhabited by no fewer than six modes in the first. It follows from this that the average number of pitches per mode is higher in the second group, and is in fact markedly so: 6 as against 4.4. Nor would one have anticipated much difference in the distribution over the total range, but the first group contains a greater number of modes using the low register notes B, d and e, while according to the positioning proposed for the modes represented numerically, in six of the second group the lowest note will be g, as against none in the first group (if inserted in Figure 5.4 , all six and *rahāwī* would be situated between *ḥijāzī* and *nayrūz* , that is, they would dominate the middle of the range). There are, however, three in each group the lowest note of which is e, and it is interesting to observe that here we have, in contrast to the average overall, virtual equality in the number of notes and, concomitantly, a smaller range in those from the second group.

5.16.3 Modes with half notes

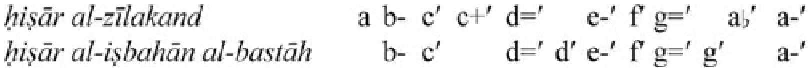
We are left, finally, with the smaller group of ten modes that contain half notes,



abū salīk	d	e			g	a	b♭									
māyāh																
abī salīk	d	e			g	a	b♭	c′			d′					
ṣa'īdī	d	e	f		g	a	b♭									
'uššāq	d	e	f+	f♯												
šahnāz					g	a-b♭	b-c′			d=′	d′					
zīlakand						a	b-c′		c+′							
ḥiṣār al-zīlakand						a	b-c′		c+′	d=′		e-′		f′	g=′	a♭′	a-′
zirkašī						a		c′		d=′	d′			f′	g♭′		
salmak											d′	e-′	e′		g′		

Figure 5.6 Modes using half notes

As might be expected, not all the theoretically possible half notes occur: we encounter c+′ of the half *ramal* set, f, b♭ and a♭′ of the half *sākāh* set, and f# and e′ of the half *rast* set. [139] Of these, b♭ in the most used, appearing in four modes, while four of the others only appear once each, underlining the marginal status of most members of this class of notes. No two modes in the group share the same pitch set. In the first three cases the half note produces a diatonic or gapped diatonic structure, but in all the remaining modes but one the smallest interval is not a semitone but a quartertone, that is, the half notes tend to be added alongside, rather than instead of, an adjacent main note, so that the effect, as with the *ramal* group, is one of compression (although in *zirkašī* and *salmak* there is a compensatory omission elsewhere resulting in a minor third). At 5.9 the average number of notes per mode is much closer to that in the *ramal* group, while with the first group one might compare the relatively large number of four modes with d as the lowest note, although only one of them contains f+, which appears in all of the equivalent eight modes in the first group. There is a certain family similarity between *ḥiṣār al-zīlakand* and a *ḥiṣār* mode in the *ramal* group, *ḥiṣār al-iṣbahān al-bastāh* :



ḥiṣār al-zīlakand	a	b-	c′	c+′	d=′		e-′	f′	g=′		a♭′	a-′
ḥiṣār al-iṣbahān al-bastāh		b-	c′		d=′	d′	e-′	f′	g=′	g′		a-′

but otherwise the modes with half notes seem to bear little structural resemblance to the others.

Also evident is that the hierarchical distinction between half notes and full notes is relatable to the marked difference in their relative frequencies, and is thus grounded in practice. Figure 5.7 displays the incidence of each note occurring in the modes where the relative pitch position is secure (that is, those not expressed numerically in Figures 5.4 –5.6), marking main notes in solid bars and *ramal* notes in bars with diagonal lines:

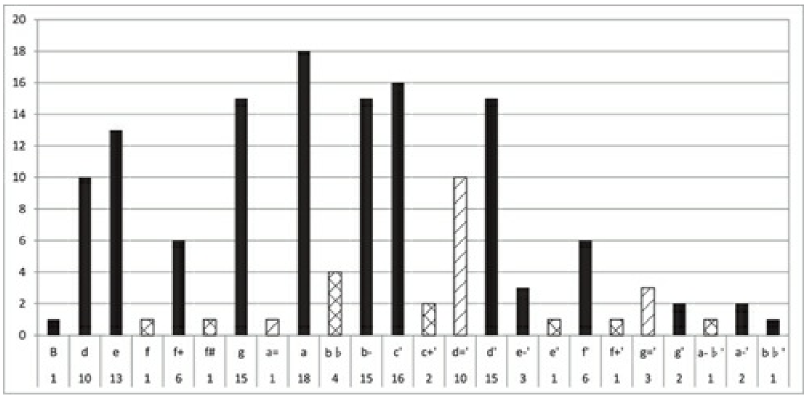


Figure 5.7 Incidence of notes expressed alphabetically

Noteworthy among the main notes is the preponderance of the d – d′ octave, with a marked reduction in the use of those above, and especially above f′, and an almost complete neglect of the tetrachord below (although the absent open string A would no doubt have been used to support further the already prominent a, and perhaps d, e and d′ as well). Among the other categories, the only note to occur with comparable frequency is the *ramal* d=′, while there is just a faint sprinkling of half notes. For the modes expressed numerically, the comparable figures are:

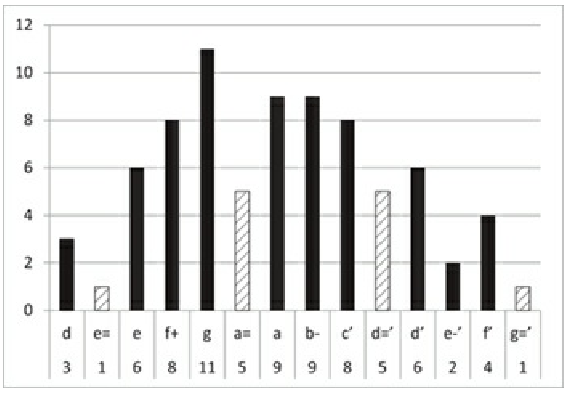


Figure 5.8 Incidence of notes expressed numerically

and while these values may not be so secure with regard to the distribution across the gamut, they certainly confirm the secondary status of the half notes, for none of them occur. On the other hand, the *ramal* notes appear with relatively greater frequency, while still not approaching that of the main notes, among which it may be noted that the *sākāh* notes are now more or less on a par with the *rast* and *dūgāh* notes.

Overall, the picture that Figures 5.4 –5.6 present is rather mixed. There are certain obvious small scale areas of similarity between various modes, but the dominant impression is on the one hand of heterogeneity of structure, with modes of vastly different compass and degrees of density, and on the other of a clumping together of the majority within the central area covered by the d, g and c′ strings.

5.16.4 Direction

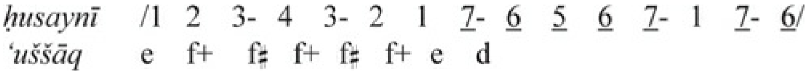
But despite such jostling, it has been seen that there are remarkably few cases in which two modes are defined in terms of the same pitch set, while at the same time the modal specifications, generally of direction, that are required to separate these pairs are also frequently encountered elsewhere, and appear indifferently across the categories.

The first obvious distinction is that drawn between modes described in terms of a directly ascending (A) series of notes and those described as directly descending (D). The former are the more numerous, with nine examples [140] as against five descending, [141] but more numerous still, with 14 examples, [142] is the group of modes with an A D contour, whereas the only mode with a D A contour is *ra's al-hank* . This has the same initial and finalis, as do five of the A D group, but in all the others save one the initial ascent is shorter, so that the finalis is lower than the initial.

The oscillating contours exhibited by the remaining modes are:

A D A	*dūkāh*
A D A D	*abū salīk, ḥusaynī, muḥayyir, muwallad, ʻuššāq*
D A D A	*haftkāh, ʻirāq*
A D A D A	*ṣaʻīdī*
D A D A D	*šahnāz, kardāniyā*
A D A D A D	*jārkāh, mubarqaʻ, nikārī, salmak*

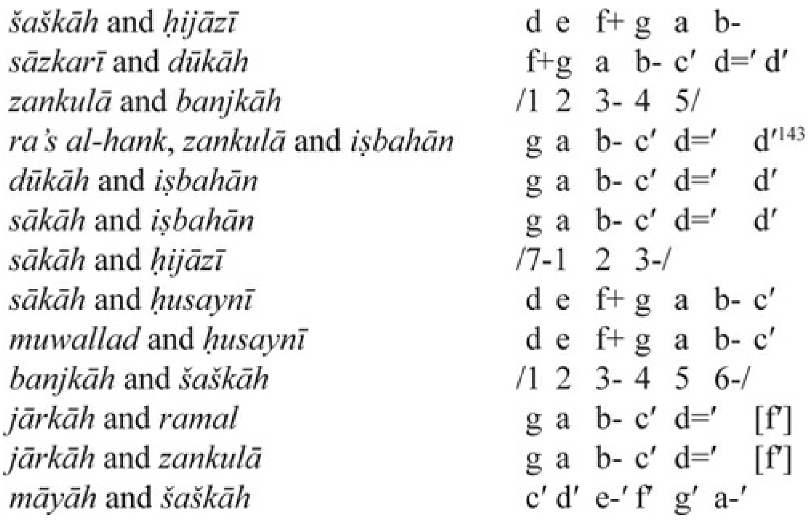
Such reductive outlines conceal, however, internal differences that can, on occasion, be marked. With both *ḥusaynī* and *ʻuššāq* , for example, we have an A D A D contour:


ḥusaynī /1 2 3- 4 3- 2 1 7- 6 5 6 7- 1 7- 6/
ʻuššāq e f+ f𝄲 f+ f𝄲 f+ e d

but whereas in the former the first A and D span a fourth and a minor seventh respectively, in the latter the equivalent intervals are a whole tone and a quartertone.

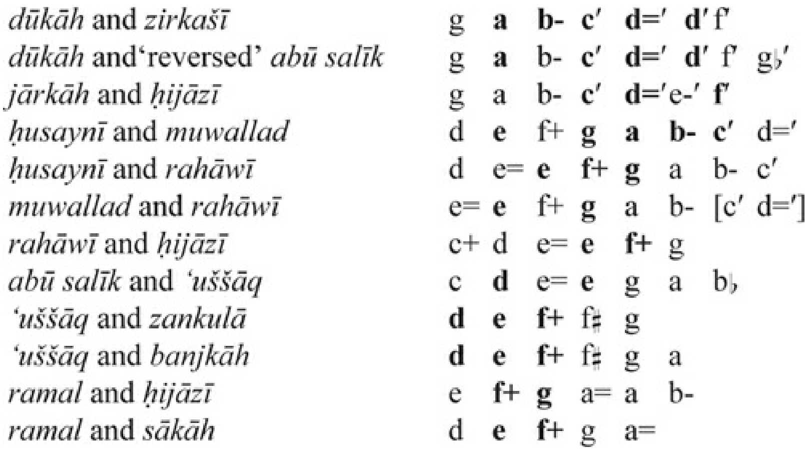
5.17 Combinations

Although it has been possible to identify certain areas of similarity within this quite extensive corpus of modes, the evidence it provides for regularities interpretable as resulting from system-forming constraints appears less than compelling. There is, however, one further relevant question to consider, whether the various pairings or sequences of modes regarded by Ibn Kurr as felicitous are random or appear to be patterned in some way, whether by similarity or contrast. In the previous survey, attention was drawn in certain instances to similarities, observing in particular those cases where the pitch set of one mode coincides with that of the other or falls within it, or possibly, with those mode represented numerically, replicates all or part of it at the fourth. We thus have the pairs and the pitch sets they share shown in Figure 5.9



šaškāh and *ḥijāzī*	d e f+ g a b-
sāzkarī and *dūkāh*	f+g a b- c′ d=′ d′
zankulā and *banjkāh*	/1 2 3- 4 5/
ra's al-hank, *zankulā* and *iṣbahān*	g a b- c′ d=′ d′[143]
dūkāh and *iṣbahān*	g a b- c′ d=′ d′
sākāh and *iṣbahān*	g a b- c′ d=′ d′
sākāh and *ḥijāzī*	/7-1 2 3-/
sākāh and *ḥusaynī*	d e f+ g a b- c′
muwallad and *ḥusaynī*	d e f+ g a b- c′
banjkāh and *šaškāh*	/1 2 3- 4 5 6-/
jārkāh and *ramal*	g a b- c′ d=′ [f′]
jārkāh and *zankulā*	g a b- c′ d=′ [f′]
māyāh and *šaškāh*	c′ d′ e-′ f′ g′ a-′

Figure 5.9 Mode pairs with a shared pitch set



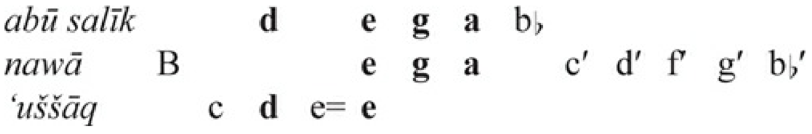
dūkāh and *zirkašī*	g **a** **b-** **c′** **d=′** **d′** f′
dūkāh and 'reversed' *abū salīk*	g **a** b- **c′** **d=′** **d′** f′ g♭′
jārkāh and *ḥijāzī*	g a b- **c′** **d=′** e-′ **f′**
ḥusaynī and *muwallad*	d **e** f+ **g** **a** **b-** **c′** d=′
ḥusaynī and *rahāwī*	d e= **e** **f+** **g** a b- c′
muwallad and *rahāwī*	e= **e** f+ **g** a b- [c′ d=′]
rahāwī and *ḥijāzī*	c+ d e= **e** **f+** g
abū salīk and *'uššāq*	c **d** e= **e** g a b♭
'uššāq and *zankulā*	**d** **e** **f+** f♯ g
'uššāq and *banjkāh*	**d** **e** **f+** f♯ g a
ramal and *ḥijāzī*	e **f+** **g** a= a b-
ramal and *sākāh*	d **e** **f+** g a=

Figure 5.10 Mode pairs with a partially shared pitch set

These are all either main note modes or combinations of main note modes and those with *ramal* notes, with the mixed type being the more common. To be noted is that no fewer than four of these combinations involve *iṣbahān* and another mode that uses part of its pitch set.

In other cases there is a partial overlap, with the two modes sharing two or more pitches, but with each containing at least one pitch not found in the other. Indicating in bold the notes held in common, and again assuming that the form of *dūkāh* preferred in these combinations is that using the same pitch set as *iṣbahān*, we have the pairs shown in Figure 5.10 . All except two of these produce a combined pitch set containing a *ramal* note, and in the several cases where there is a /1 2= 2/ whole tone this is followed by further pitches above, contrary to the individual modes. The two modes without a *ramal* note contain a half note, so that in no case is there a combined pitch set consisting only of main notes. Nevertheless, for the most part the resulting pitch sets deviate only slightly from the levels of consonance (as expressed by the proportion of internal fourth and fifth relationships) exhibited by main note modes: no combination spanning more than a fifth contains fewer than three such relationships.

Analogous to the above is the three-term sequence of *abū salīk, nawā* and *'uššāq* , in which there are three notes in common between the first and second, two between the first and third, but only one between the second and third:



abū salīk			**d**		**e**	**g**	**a**	b♭					
nawā	B				**e**	**g**	**a**		c′	d′	f′	g′	b♭′
'uššāq		c	**d**	e=	**e**								

Given that these three occupy the first three places in al-Urmawī 's recasting of the order of the *šadd* modes, it is of interest to see them also juxtaposed by Ibn Kurr, but although he points to the common feature of the finalis of *abū salīk* being also the initial of *'uššāq* , it is difficult to see what else might link these seemingly very different structures. It is true that if all three are considered as a single pitch set, it is one marked by a high incidence of consonant relationships (at the unison, fourth, fifth and octave), but the melodic morphology of each that Ibn Kurr's definitions suggest is vastly different, with the compass and layout of *nawā* suggestive of a fundamentally instrumental articulation, despite the fact, as al-'Umarī confirms (Figure 5.3), that it was certainly represented in the vocal repertoire.

A further three-term sequence is that of *māyāh, abū salīk* and *'irāq* . Here again, despite noting the octave from the beginning of *māyāh* to the end of *abū salīk* and the identity of the initial of *abū salīk* and the finalis of *'irāq* :

māyāh	d′ c′
abū salīk	**a** b♭ **g** d **e** d
ʿirāq	**g** f+ **e** g f+ e f+ g **a**

the sequence seems to be marked by contrast rather than similarity, while with:

nawā	b♭′ g′ f′ c′ [a g e B]
abū salīk	b♭ a g e d
rahāwī	d c+ B B=

there is insufficient precision in the description to warrant firm conclusions as to the degree of similarity between them.

In addition to the above, we find, displayed in Figure 5.11 , a further seven pairs (yielding nine possible versions) in which, accepting the occasionally tentative interpretations offered, there is just one note common to both modes.

māyāh and *ḥiṣār al-māyāh*	c′ **d′** e-′ f′
ʿuššāq and *raʾs al-hank*	d e f+ **g** a b- b
	or: d e f+ **g** a= a
banjkāh and *ḥijāzī*	g a b- c′ **d′** e-′ g=′ g′
zirkašī and *ʿirāq*	e f+ g **a** b- c′ d=′ d′ f′
	or: e f+ g **a** c′ d′ f′ g♭′
ʿirāq and *zīlakand*	e f+ g **a** b- c′ c+′
abū salīk and *rahāwī*	B= B c+ **d** e g a b♭
zīlakand and *buzurk*	g a= **a** b- c′ c+′

Figure 5.11 Mode pairs with only one note in common

In each case it is either a *rast* or a *dūkāh* note that is shared, and all but one contain a *ramal* and/or a half note, but that is hardly enough to provide a common thread of any structural importance. More significant, perhaps, would be to note that in the first seven cases, including the alternatives, the lower part consists of a straightforward zalzalian tetrachord (/1 2 3- 4/ or /1 2- 3♭ 4/), the *ramal* or half note being added above.

Finally there are, even if rare, cases in which there is no overlap at all. These consist of:

zīlakand and *ḥiṣār al-zīlakand* a b- c′ c+′ d=′ e-′ f′

which produce together a pitch set containing at least two fourth relationships and possibly three (if d=′ has the value d-′); *ʿuššāq* combined with itself a fourth above or below (so that every note stands in a consonant relationship with its counterpart); and possibly also:

māyāh and *ʿirāq* e f+ g a c′ d′

With this pair it may be that *abū salīk* intervened, but while this has three pitches in common with *ʿirāq* , it still provides no overlap with *māyāh* . Be that as it may, this combination, whether of two or of three modes, is still one characterized by a high proportion of consonant relationships. Thus although, broadly, the lower the number of notes in common the lower the number of pairs, there is no corresponding lowering of the level of consonance, and there also seems to be a comparable distribution of scale types (main notes only; with a *ramal* note; with a half note) across the range.

[1] Presumably derived from the Persian *āhank* ('melody'), it is again sufficiently naturalized to be provided with an Arabic plural, *hunūk*. In Systematist texts we find *āhank* (D'Erlanger 1939: pp. 251–2, where al-Širwānī quotes Marāġī), denoting the centre of singer's vocal register. In one anonymous and presumably later Arabic text, *ḏikr dā'irat al-anġām al-arba'a wa-'l-'išrīn*, we find *hank* as the name of a mode (Shiloah 2003), and in another, the *šajara ḏāt al-akmām*, ed. Ġ.'A.al-M. Ḥašaba and Ī. Fatḥallāh (Cairo, 1983: p. 20) it means 'note'.

[2] This is clearly the primary sense understood by al-'Umarī, who speaks (*masālik al-abṣār*, p. 2) of the difference between ancients and moderns with regard to the names of the *anġām* in which songs are composed.

[3] An element often absent from drier definitions: the implications of al-Urmawī's *maḥnūn ilayh bi'l-ṭab'* (*kitāb al-adwār*, p. 41) may come close, but it is not an exact equivalent, excluding non-musical noise rather than embracing emotional content.

[4] Ibid.

[5] It is in this basic sense of 'song' that it is used by al-'Umarī, who reports (*masālik al-abṣār*, p. 311) being told about several songs (*'iddat aṣwāt*) by al-Urmawī.

[6] It is thus used by al-Urmawī (*kitāb al-adwār*, p. 64) as the antonym of *mutanāfir*, 'dissonant' (of intervallic relationships). Elsewhere he prefers *muttafiq* ('concordant').

[7] Where Ibn Kurr contrasts full (*kāmil*) notes with half (*niṣf*) notes. The distinction is not relevant here.

[8] Ibn al-Ṭaḥḥān uses the related verb *kamula* (*ḥāwī al-funūn*, p. 21, Neubauer 1998: p. 70) to encompass also rhythmic and formal elements.

[9] Although (Kojaman 2001: pp. 147–8) it may also be generalized to correspond rather to 'scale'.

[10] However, Ibn Kurr's clear initial distinction between *naġam* and *naġma* becomes somewhat blurred later. For *naġam* functioning as the plural of *naġma* ('note') see al-Ḥasan al-Kātib (*kamāl adab al-ġinā'*, ed. Ġ.'A. al-M. Ḥašaba (Cairo, 1975), p. 41) – and see also the various attestations mentioned for *naġma* and *naġam* in Al Faruqi 1981 and D'Erlanger 1949 (pp. 69–70). With al-Irbilī we find four modes termed *naġma* pl. *anġām*, but here the influence of metrical constraints cannot be excluded.

[11] The text has *an yakūn rābi' arba'a*, that it should be 'the fourth of four', but it is clear from what follows that the term applies to all four. In referring specifically to a particularly important group of four Ibn Kurr conveniently passes over the fact that the number of modes he classifies as *hank* is significantly larger.

[12] 'of them' is *minhum*, which one might wish to construe as referring to the Persians: but pronoun concord does not always follow Classical Arabic norms, and here *-hum* equates to Classical Arabic *-hā*, referring to the four modes (the sentence would in any case be ungrammatical if it referred to the Persians).

[13] At this point there is a connection made between *līn* and *hubūṭ* and *ḥidda* and *'uluww*, thus confirming that *habaṭ* = descending and its counterpart *šāl* = ascending: it thus excludes the possibility that these terms could relate to hand movements along the fingerboard whereby e.g. the 'descent' of *habaṭ* would equate to a rise in pitch.

[14] e.g. *kitāb al-adwār*, pp. 66, 68. Ibn Kurr will also use it later in a more comprehensive sense, referring to the complete range of notes.

[15] Although rather than *tā* and *nā* these usually contain *ta* and *na*. In the manuscript the first letter of *tā* is unpointed, but *nā* occurs later and the other theoretically possible readings may be excluded. The expression of the whole is curiously stuttering: 'with pairs of letters chosen from those suitable, such as *tā, tan, nā* and *nan* and what is suitable to that from the letters that are suitable to that' (*bi-ḥarfayn min al-ḥurūf al-munāsiba miṯl al-tā' wa-'l-alif wa-'l-tā' wa-'l-nūn wa-'l-nūn wa-'l-alif wa-'l-nūn ma' al-nūn wa-mā nāsaba ḏālik min al-ḥurūf al-munāsiba li-ḏālik*), yet scribal distortion seems unlikely.

[16] Ibn Kurr switches between *māya* (which is the form used here) and *māyāh*, with a lengthened final vowel, and it is the latter which will be used consistently in the present work. Systematist texts have *māya*, but elsewhere we find *mā'a* and even *māda*. It is the name of a mode, not of a note.

[17] But both *tuzād* and *baqā'* are conjectural readings of unpointed words.

[18] Another conjectural reading: the original has *mdāy*.

[19] Emended from *ḍabṭ al-mawāzīn azminat al-ḍurūb*.

[20] As if to underline the various and not always very clearly demarcated senses in which *ṭabaqa* is used, Ibn Taġrībirdī refers in his notice on al-Urmawī (*al-manhal al-ṣāfī*, vol. 7, 1994, p. 376) to the *kitāb al-adwār* (in which *ṭabaqa* has the precise meaning of a pitch zone) as being on the 'art of the *ṭabaqa* and the tone (*ṭanīn*) and the practice (*ḍarb*) and theory of the lute'. That it may also refer to the correct pitch, or more simply being in tune, is demonstrated in the fourteenth-century *al-mulaḥ wa'l-ṭuraf min munādamat arbāb al-ḥiraf* by al-Bilbaysī (British Library MS Add. 19411, fol. 76r), where a singer accuses the other musicians, in forthright colloquial, of 'crying/wailing out of tune' (*bi-t'ayyaṭū fī ġayr al-ṭabaqa*).

[21] Both here and elsewhere the text has *ḥadd*.

[22] The Persian *rāst*, Arabicized as *rast*, has been sufficiently naturalized for Ibn Kurr to give it an Arabic plural, *rusūt*. But while in other texts it may designate, as expected, a mode, in the *ġāyat al-maṭlūb* it refers specifically and only to a note that recurs at various points within the complete pitch set.

[23] With the pl. *armāl*.

[24] Not part of Systematist terminology, *sāz* is another Persian borrowing, presumably relating to the sense 'harmony' rather than to the primary meaning of 'instrument'. On one occasion it is written *šāz*, but a derivation from *šāḏḏ* may be excluded on semantic grounds.

[25] The phraseology echoes the earlier 'to establish the patterns of durations within the rhythmic cycles' (*li-ḍabṭ mawāzīn azminat al-ḍurūb*).

[26] Whether 'melody' or 'mode' the thrust of the argument is exactly the same, the distinction therefore unimportant.

[27] al-Ḥasan al-Kātib, *kamāl adab al-ġinā'*, pp. 113–14.

[28] Farmer 1953–4, Neubauer 1994, Wright 1966.

[29] For further details see 5.16.2.

[30] Found already in al-Kindī (*mu'allafāt al-kindī al-mūsīqiyya*, p. 55).

[31] In addition to the difficulty of accounting for the substitution by scribal error there is a later pronoun referring back to these notes that is plural rather than dual.

[32] Of the intervening notes the text mentions only *sākāh*: to be presumed is a scribal lapse, and that the original included mention of the inclusion of *dūkāh* and omission of *ramal*.

[33] Grammatically, it is also possible that the antecedent could be *naġamāt* ('notes').

[34] *kitāb al-adwār*, p. 41.

[35] The fact that a modern *maqām* may not repeat at the octave does not invalidate the general principle.

[36] The next in the sequence, *haftkāh* (< Persian *haftgāh* 'position seven'), will appear later as a mode name. The exact pronunciation of these terms is unknown, but some may well have included extra vowels to make them conform to the norms of Arabic syllable structure, *banjkāh*, for example, being realized as *banjakāh*.

[37] See Manik 1969.

[38] See Wright 1978: pp. 37–43.

[39] Ibid.: pp. 172, 174.

[40] There is no mention of the intervening pitches between the last two notes in the first system (and, by extrapolation, the others). Although their inclusion cannot be categorically excluded, the text does seem to imply a final rising fourth after the ascending–descending traversal of the tetrachord.

[41] A conventional label derived from Zalzal, the early Abbasid musician credited with the invention (perhaps better to be understood as the introduction, within the art-music context) of the neutral third that bears his name, the *wusṭā zalzal*.

[42] Assuming that the comma difference between the two arrived at by Pythagorean divisions was not functionally significant, in other words that such minute distinctions in intonation were not consistently maintained (because not meaningful), 1# and 2♭ may be considered synonymous, choice being a matter of convenience, and arbitrary.

[43] Setting aside its appearance as part of an obsolescent mode name, *mujannab al-ramal*.

[44] Guettat 1980: pp. 236–7.

[45] *masālik al-abṣār*, p. 365.

[46] For the definition see 5.8.2. It may be noted that although there is nothing comparable in Systematist theory, this hierarchical half/whole formulation is not peculiar to Ibn Kurr: it will reappear, if with different terms, in later texts. e.g. the *šajarat ḏāt al-akmām*, where the terms used are 'bound' (*muqayyad*) and 'free' (*muṭlaq*). These may be related to a shift from the *'ūd* to the *nay* as the instrument in relation to which theory is articulated, referring to closed vs open finger holes (see Neubauer 1999–2000: p. 328), but despite the parallel, the logic of the disposition of tones points to Ibn Kurr still adhering to an *'ūd*-based conception.

[47] *kitāb al-adwār*, pp. 64–70.

[48] Wright 1978: pp. 173–4.

[49] Ibn Kurr consistently gives the name of this mode as *zīlakand*. Of Persian origin (presumably *zīr* + *afgand* 'omitting the *zīr* [string note]'), *zīrafkand*, the form used by al-Urmawī, has thus suffered a significant phonetic change on its journey westwards.

[50] Wright 1978: p. 57.

[51] Ibid.: p. 53.

[52] This name is variably given as *rahāwī* (the form that will be preferred here) and *rahawī* by Ibn Kurr. Elsewhere *rāhawī* is also found. To be noted is a folk etymology, mentioned in the *kanz al-tuḥaf*, of *rahāwī* from Ruhā, Edessa, despite there being no attestation of /u/ as the first vowel.

[53] By Ibn Sīnā, Kay Kā'ūs and Niẓāmī (see Wright 2004–5).

[54] Our sources come from Egypt (al-Tīfāšī) and Khorasan (Nīšābūrī) as well as Iraq (al-Urmawī's first draft of the *kitāb al-adwār*, more representative of current opinion that the definitive version). Nīšābūrī's text may be even earlier: it survives in a single copy dated 1265, and has been variously assigned to (the first half of) the thirteenth century, the period from the second half of the twelfth to the first half of the thirteenth (Dzhumajev 1994), and the early twelfth century (Pūrjawādī 1995), while according to Fallahzade (2005) Dānišpažūh opts variously for the first half of the twelfth century (p. 111) and (the first half of) the thirteenth (p. 115). For further versions see Neubauer 1991.

[55] Whereas Nīšābūrī (Pūrjawādī 1995) continues with *muḫālif-i rāst, 'irāq* and *muḫālifak* (although according to Šīrāzī [Wright 1978: p. 47] *muḫālifak* was an alternative designation of *zīrafkand*, thus narrowing the gap somewhat). It is of incidental interest to recall that the modes specified for the introductory song in each of the three surviving shadow plays by Ibn Dāniyāl are, successively, *rāst, 'irāq* and *iṣbahān*, surely a reflection of their status at the head of the *šadd* group.

[56] *mu'allafāt al-kindī al-mūsīqiyya*, pp. 100–3. See also Farmer 1955–6.

[57] Wright 2010: pp. 154–8.

[58] British Library Or. 6629, fols 65v–68r; tr. In D'Erlanger 1939: pp. 429–40; and to take just one later example, one may point, ironically, to the totally independent succinct account added on the final folio (47v) after the end of the *ġāyat al-maṭlūb* itself, which is concerned precisely with such cosmological relationships.

[59] The correspondence is recognized explicitly by Ibn Kurr in the section on *'uššāq* (5.8.8), where he says straightforwardly that 'they (the Persians) intend (*arād*) by *rast ra's al-hank*'.

[60] *rūm mutaqaddimūn*, a phrase which conflates a reference to (at least a certain degree of) antiquity combined with one to Byzantines as distinct from ancient Greeks.

[61] The text actually has *zankulā* in place of *zīlakand*. This results from confusion: *zankulā* is first discussed along with the *ra's al-hank* group, and is evidently associated with them. Yet it is regarded as weaker than *ra's al-hank*, and the fact that it has a section devoted to it that is placed after the first eight shows that it does not belong in the first circle, whereas the status of *zīlakand* as one of the first four is assured.

[62] I am indebted here to Ioannis Arvanitis for guidance.

[63] *bzwṭs* → *brūṭus* requires merely deleting the dot from z (ز) to arrive at r.

[64] *dqn'rs* → *diftārus* requires deleting a dot from q (ق) and adding one to n (ن) to arrive at f and t respectively.

[65] *brøṭws* → *trīṭūs* requires substituting two dots above for the one below the b (ب) to arrive at t, and realizing ø as y.

[66] The representation of the plagal set is a little more erratic. The change of ending on e.g. *brūtū'* clearly reflects the genitive form πρῶτου, but the correspondence between *blān* and πλάγιος (του) is less straightforward, involving loss of the case ending as well as the following article. Further, since on two occasions *blān* is written separately the substitution of y for n requires not just substituting different dots but also changing the letter shape somewhat, n (ن) becoming y (ي). The major problem remains, however, the ending.

[67] Neubauer 1994, Wright 1966.

[68] The one possible exception might be the concentric circles used to align pitches (*kitāb al-adwār*, p. 113), which might be seen as analogous. There is, however, no example in the *ġāyat al-maṭlūb* of al-Urmawī's more basic use of circular representation for consonant intervallic relationships within octave scales.

[69] Accordingly, the Arabic form *āwāz* (pl. *āwāzāt*) will be used instead of the original Persian *āvāz*.

[70] Corresponding to the *nawrūz* of al-Urmawī and Šīrāzī, Ibn Kurr writes *nyrwz* or *nyrz*, so that as well as *nayrūz*, the form adopted here, both *nīrūz* and *nīruz* would be possible readings. Marāġī will later draw a distinction between *nawrūz*, one of the six *āwāz* modes, and a *šu'ba* called *nīriz*.

[71] Equivalent to al-Urmawī's *kawāšt*. In the *ġāyat al-maṭlūb* the second vowel is consistently short.

[72] Equivalent to al-Urmawī's *kardāniya*. In the *ġāyat al-maṭlūb* the final vowel is consistently long.

[73] India Office Library, Ethé 2221, fol. 259b.

[74] He stresses (*kitāb al-adwār*, p. 96), though, the adroitness needed to negotiate them (*bi-ḥusn al-talaṭṭuf fī al-intiqāl*).

[75] Interestingly, he suggests that derived forms might be more attractive:

wa-rubbamā yakūnu far‘un sumi‘ā min naġami l-aṣli alaḏḏa ṭaba‘ā.

[76] This has nothing to do with Ibn Kurr's *sāz*, being derived from the modal category term *šāḏḏ* (pl. *šawāḏḏ*). The shift *ḏ* > *z* is a dialect feature. See further footnote 82.

[77] *muḫayyir (al-Ḥusaynī)* is cited by al-Urmawī (*al-risāla al-šarafiyya*, p. 220), *musta‘ār* by al-Lāḏiqī (British Library Or. 6629, fol. 71v, D'Erlanger 1939: p. 451).

[78] He is referred to not by name but obliquely as *baʻḍu man daqā'iqa l-fanni ḥawā*.

[79] With regard to the inclusion of *kardāniyā* in place of *zīrkašī* he adds, tartly, *wa-lam yubin kayfa ‘ani l-aṣli ntašā*.

[80] From the Persian *zangūla* ('little bell'), it is written *zankūla* by al-Urmawī, but Ibn Kurr consistently has a short second vowel and a long third, his orthography *znklā* being presumably to be realized as *zankulā*.

[81] In the form *sāzkār*, which is included by Seydī (*Seydī's book on music*, p. 61) and is also found in other early Turkish texts (Popescu-Judetz 2010).

[82] Despite their different semantic origins, *muwallad* meaning both 'engendered' and 'of mixed blood', while *šawāḏḏ* is the plural of *šāḏḏ* 'deviant'. The term *šawāḏḏ* is also used by al-'Umarī, who applies it (*masālik al-abṣār*, p. 359) to *‘uzzāl* – in parallel with al-Irbilī. Shiloah (2003) cites an anonymous and undated treatise, *ḏikr dā'irat al-anġām al-arba‘a wa-'l-‘išrīn*, in which it is used (in the form *šawāzz*) as a modal category with five modes listed as belonging to it, including *‘ukbarī* and *hank*.

[83] See Wright 1978: pp. 199–209 for inferences concerning consonance.

[84] No clear distinction is drawn between *maḥaṭṭ* and *maḥaṭṭa*, so that we have *zankulā natajat min rast huwa āḫir maḥaṭṭih yašīl ilā ... al-rast allaḏī huwa āḫir maḥaṭṭat ra's al-hank min al-līn*.

[85] A falling-rising contour is given by al-Lāḏiqī (British Library Or. 6629, fol. 66r, D'Erlanger 1939: p. 429), and in the *šajara ḏāt al-akmām* (p. 53).

[86] For the evidence that *šayl* can mean neutrally 'onset' rather than specifically 'ascent' see the discussion of *iṣbahān* (5.8.3).

[87] As, for example, by al-Lāḏiqī (British Library Or. 6629, fol. 56v, D'Erlanger 1939: p. 399). The *reductio ad absurdum* of this type of definition occurs with the logical extension of the system to *yakāh*, defined as one note, e.g. by al-Lāḏiqī (British Library Or. 6629, fol. 69v, D'Erlanger 1939: p. 440), although al-'Umarī already provides evidence of it being a fully fledged mode (*masālik al-abṣār*, p. 358). The earlier account of *dūkāh* given by Šīrāzī (Wright 1978: p. 172) is much more subtle and informative.

[88] The second to fifth notes are all introduced by 'and then' (*ṯumma*), but the final three by just 'and', suggesting that the phrase was not erroneously inserted into an originally straightforward sequence going from the first note to the ninth.

[89] *bayt* (pl. *buyūt*) is a common term later (see Neubauer 1999–2000: p. 327). Ibn Kurr uses *buyūt* below to refer more generally to the notes of a given mode.

[90] In the course of the description the phrasal definition of the second note is repeated, but this is clearly an example of dittography. There is also a final remark which could be read as: 'you hasten (*tusri‘*) from a and return to it', suggesting a convention of performing the initial ascent relatively rapidly. But although the verb occurs nowhere else, it may be suggested that the reading should be the blander *tašra‘* (in place of the expected *tašīl*), yielding 'you start from a and return to it'.

[91] It may be noted that establishing that the initial reference is to the upper *rast* of *ra's al-hank* helps confirm that its contour is descending–ascending.

[92] Both here and in the following statement the text says merely *ramal*. This is not the only context in which the half specification is omitted: it was, presumably, understood.

[93] Wright 1995: p. 470.

[94] Wright 1978: p. 58.

[95] Elsewhere we find *basta*: the lengthening of the final vowel is analogous to that in *zankulā* and *kardāniyā*, and was evidently a feature of the Cairene pronunciation of these names.

[96] He adds that it is the notes *sākāh* transposed (*muqaddar*) and *rast* transposed, which seems to add nothing save, possibly, to confirm the identity of the framing notes 3- and 1.

[97] This disagreement is still recognized in the mid fourteenth-century *kanz al-tuḥaf*, although it defers to al-Urmawī's authority.

[98] For al-Urmawī and others this mode is known as *būsalīk*, a single word, whereas for Ibn Kurr it has the form of a possessive construction made up of *abū* (father [of]) + *salīk*, the first member of which is variable, so that according to its function in the sentence it may also appear as *abāsalīk* or *abīsalīk*.

[99] This and the previous emendation are supported by the fact that they resolve what would otherwise be anomalies in the text. In the case of the first note, the insertion of '*dūkāh* above' (*al-dūkāh allatī fawq*) before *rast* 3 supplies a feminine noun that justifies the otherwise erroneous feminine suffix pronoun in the definition of the second note, while in the case of the assumed reversal of direction the substitution of *irtafa‘* or *šāl* for *habaṭ* justifies the presence of a following *ilā* instead of the usual *min*.

[100] The first note, B, is defined not only as the *dūkāh* above *rast* 1 but as the third note of the lowest register (*awwal al-ṭabaqa*), thas is, it is above A and B=.

[101] Reading, tentatively, *bi-ba‘īd*: the page at this point has a dark damp stain, and the word is virtually illegible.

[102] Ibn Kurr adds the comment that it, i.e. *rast* 2 (= d), the initial of *‘uššāq*, is the *jawāb* of its *jawāb*, that is, of b♭′, the finalis of *nawā*, referring therefore once again to two heptachords, d – c′ and c′ – b♭′.

[103] For further discussion see 5.4.2 and 5.4.3.

[104] From Persian *buzurg* ('large', 'great'), the obvious realization of *bzrk* is *buzurk*, yet in later texts *buzruk* is encountered (Neubauer 1999–2000). Here the former will be preferred, and it may be noted that al-Irbilī's *urjūza* supports it (in two hemistichs where the metre allows the reading *buzurk* but not *buzruk* [/*ṯumma li-ṯā/liṯin buzur/ku rāhawī/* and */bi-zirwakan/da wa-buzur/ka zankulā/*]).

[105] The reading of this word is, however, uncertain.

[106] The text has material missing here, but is easy to restore.

[107] Properly 'they are all', corresponding to *kullan minhum*. Logically, however, the intention must have been to emphasize the independence of the (non-)derived pair, *buzurk* and *rahāwī*, so that one might have expected, rather, the dual *kullan minhumā* (or the more classical *kilayhimā*). It is tempting to add that *zīlakand* in any case belongs to the *hank* category, but that *ṣawt* might be general rather than specific here is suggested by the fact that we have a parallel passage in the following section, again using *ṣawt*, where the corresponding pair are *Ḥusaynī* and *nawā*, the second of which is also a *hank* mode. In the absence of precise categorizations, then, no harm will be done if the plural of the text is left undisturbed, even if the sense is essentially dual.

[108] Ibn Kurr's term here is *aṣwāt*, but it is clear from the following reference to *iṣbahān* that it does not designate just the *ṣawt* modes.

[109] Here and below Ibn Kurr has the grammatically anomalous *al-māyāh abīsalīk*, presumably on the ground that the phrase needed to be marked as definite and that the least objectionable place to put the article was at the head.

[110] Al-Ṭanjī 1968: p. 96.

[111] An adjectival form from *šawāḏḏ*.

[112] Expressed as 'you combine this mode with the like' (*turakkib hāḏā al-naġam bi-miṯlih*).

[113] Expressed as 'and so it is difficult/intricate for them' (*fa-li-ḏālik aškal ʿalayhim*).

[114] Wright 1978: p. 57.

[115] Derived from *zīrkašī*, the form used by Ibn Kurr has a short first vowel, and the pronunciation *zarkašī* is not to be excluded.

[116] Emending the text from *wa-tāratan yakūn abūsalīk maʿkūsan fī waḍʿih* to *wa-tāratan yakūn abāsalīk maʿkūsan fī waḍʿih*.

[117] Defined as the third *rast* above the *rast* below the *dūkāh*.

[118] There remains just one further puzzling detail in these final remarks. The initial *rast* is qualified as 'in the *ṭabaqa*' and the finalis as 'of the *ṭabaqa*', and if the text as it stands is correct it is difficult to see what this distinction might capture.

[119] Wright 1978: p. 176. Šīrāzī also offers 1 as a possible finalis.

[120] Ibid., p. 174.

[121] e.g. Marāġī, *jāmiʿ al-alḥān*, p. 143, al-Lāḏiqī (British Library Or. 6629, fol. 58v, D'Erlanger 1939: p. 407).

[122] This higher alternative is also supported by Šīrāzī's version (Wright 1978: p. 176).

[123] British Library Or. 6629, fol. 71r, D'Erlanger 1939: p. 448.

[124] *wa-kullamā 'ntahā bihī ilā ʿadad / zāda ʿalayhī ġayruhū wa-lā yuḥadd* ('Whenever someone arrives at a particular total / someone else adds to it, so that it is limitless') It should also be noted that al-Irbilī names a further three modes not cited by Ibn Kurr, *mustaʿār, al-nahrī* (presumably a corruption of *mā warāʾ al-nahr*), and *ḫwārazmī*.

[125] *min fawq rast raʾs al-hank yaḥuṭṭ ʿalā rast raʾs al-hank*.

[126] It begins *fa-hāḏā naġam abūsalīk*, a pointless (and grammatically incorrect) confirmation but one for which there is a parallel elsewhere. However, if emended to the standard *wa-yaḥsun abūsalīk* or *wa-yaḥsun naġam abīsalīk*, syntactic normality is restored.

[127] The phrase is *min āḫir maḥaṭṭih*.

[128] Although the final part of the text concerning *ʿuššāq* (*wa-bi-ʿuššāq muqaddar lah min baʿḍih awwaluh āḫir maḥaṭṭih*) is again unusual, the point of including *min baʿḍih* being unclear.

[129] The immediate antecedent is *banjkāh*, but the logic of the passage suggests that the reference is to *ʿuššāq*.

[130] *masālik al-abṣār*, p. 356.

[131] The *masālik al-abṣār* also contains a further three mode names not referred to by Ibn Kurr: *mazmūm* (pp. 373 and 381), an interesting survival from the older *aṣābiʿ* repertoire, *yakāh* (p. 358), in contrast a new entrant, and *ṭaraf*? (or possibly *ẓarf*?) (p. 343), a name encountered nowhere else.

[132] There is in addition a piece in both *māyāh* (which al-ʿUmarī represents as *māʾāh*) and *abūsalīk*.

[133] Also called *muḫayyir al-ḥusaynī*, as in the *kitāb al-adwār*. One song is described as in *muḫayyir min al-nayrūz*.

[134] In one case written *kawaštā*, with a supplementary final long vowel by analogy with *zankulā*, etc.

[135] In one case with the epithet 'sincere' (*muḫliṣ*).

[136] Called, pleonastically, *buzurk kabīr*.

[137] Called *iṣbahān rast* (unless a mistake for *iṣbahān* and *rast*).

[138] Variously given as *zawalkand, zirūkand* and [*zīra*]*fkand*.

[139] The g♭′ in *zirkašī* is an exception: not properly part of the pitch system, it was presumably substituted for by the lower value of g=′.

[140] *ḥiṣār al-iṣbahān al-bastāh, ḥiṣār al-zīlakand, māyāh al-ḥusaynī, nawā, sākāh, ʿukbarī, zankulā* and two *muwallad* modes.

[141] *banjkāh, buzurk, māyāh, rahāwī, šaškāh* (although with *rahāwī* there is a possible extension involving an ascent and a further descent).

[142] *dūkāh, ḥijāzī, ḥiṣār al-māyāh, iṣbahān, iṣbahān al-bastāh, jārkāh, kawašt, nayrūz, ramal, sāzkarī, zāwilī, zīlakand* and both forms of *zirkašī*.

[143] As the discussion in 5.13.1 makes clear, the case for including *dūkāh* here is unreliable.

Chapter 6
Comparisons

In exploring the body of modal definitions provided by Ibn Kurr most individual items were reviewed in isolation, but it was sometimes found helpful in tackling difficulties to refer to Systematist accounts, thereby revealing certain similarities that the very different theoretical discourses employed tend if anything to camouflage, and pointing to an area that merits further investigation. Such similarities suggest that while Ibn Kurr’s account of the rhythmic cycles is singularly resistant to reconciliation with those of the early Systematist theorists, setting his modal definitions alongside the parallel body of material offered by al-Urmawī and Šīrāzī, might, in contrast, actually shed further light on both, improving our understanding of Ibn Kurr’s account and at the same time helping on occasion to clarify problematic aspects of its Systematist counterpart.

6.1 Combinations

We may begin where we left off, with a consideration not of individual structures but of the ways in which they can be felicitously juxtaposed. This is a topic that al-Urmawī fails to explore, but Šīrāzī provides what appears initially to be a direct term of comparison for the various examples mentioned by Ibn Kurr. He proceeds not by citing appropriate combinations for individual modes as they are being presented but by compiling an extensive list of pairs of modes or, more precisely, their characteristic basic elements, most but not all at the same pitch,[1] and with a total comfortably in excess of the number of juxtapositions mentioned by Ibn Kurr it might be anticipated that several of Šīrāzī’s pairs would correspond to them. However, to judge by names alone there are just two possible matches, *ḥijāzī* and *sākāh*, and *iṣbahān* and *sākāh*.[2] Given the relatively high incidence of mode names only recognized by one of the two authors it might be thought that this number would be increased by taking account of those cases where they provide different labels for what is the same or nearly the same modal entity, but noting the equivalence of *zīlakand* and *kūček* would add just one further match (*‘irāq* and *kūček*), while noting the near equivalence of *iṣbahān* and the related *rakbī*, which appears in four of Šīrāzī’s pairs, changes nothing. Also to be considered is the contrary, the misleading coincidence of a name that is common to both authors, but relates for each to a somewhat different modal entity, thereby further eroding the potential for correspondence, a case in point being *ḥusaynī*, which appears in a number of Ibn Kurr’s sequences and is the most common mode of all in Šīrāzī’s list. Nor can it even be assumed that where names and things correspond the conjunction will necessarily be the same: for Ibn Kurr *ḥijāzī* and *sākāh* appears to refer to /7- 1 2 3-/ + /1 2 3-/, while for Šīrāzī it may have implied, rather, /3- 4 5+ 6-/ + /1 2 3- (4 5)/.

As a result, we find a surprisingly low incidence of equivalent pairs. Nevertheless, the impression of there being hardly any common ground is deceptive, for closer scrutiny of these modal juxtapositions reveals a considerable degree of structural similarity with regard to the incidence of consonant intervals resulting from a preference for parallelism and overlap. Both authors thus present outputs that have been generated by the same processes and conform to a similar aesthetic principle. At most, assuming that the virtual absence of identical combinations is not to be explained simply as chance – the number of theoretically possible pairs runs well into the hundreds – one might wish to infer the existence of regional preferences for different patterns of association, albeit in both cases ones foregrounding the combination of modal elements with shared features. To be noted, for example, is that despite the very muted presence of *ra’s al-hank*, /1 2 3- 4 …/ is a particularly common beginning in the combined pitch sets of the sequences mentioned by Ibn Kurr, while /1 2- 3♭ 4 … / is rare, whereas in Šīrāzī’s pairs (where *rāst* is similarly infrequent) the opposite would appear to be the case.

6.2 The *hank/šadd* modes

Returning now to the individual modes, they may appropriately be reviewed within the framework of the sets to which they are assigned. It may be recalled that the primary group of 12 recognized by al-Irbilī and al-Urmawī is split by Ibn Kurr across two categories, some being termed *hank*, others *ṣawt*, with precedence being accorded to the former. The accounts he provides of these quite simply ignore the theoretical armature within which Systematist definitions are articulated: whereas al-Urmawī presents them all in terms of octave scales, each of which is deemed to consist of tetrachord (below) + pentachord, there is not a single instance in which Ibn Kurr uses this analytical framework, or anything like it, and his descriptions would, indeed, suggest that for these modes it was a singularly inappropriate tool. However, if it is accepted that al-Urmawī is on occasion engaged in a tidying up exercise, imposing uniformity on disparate structures, so that some of the octave portraits he paints show the effects of cosmetic surgery,[3] we may concentrate on the basic elements out of which they are built as the primary terms of reference, and at this level we find, instead, a considerable degree of rapprochement. However, comparisons will largely have to disregard the various types of melodic movement that Ibn Kurr outlines, for these find hardly any echo in al-Urmawī’s account.

6.2.1 ra’s al-hank, ‘irāq

In Ibn Kurr’s order of presentation, we find an initial emphasis on *ra’s al-hank*, equivalent to al-Urmawī’s *rāst*,[4] both of them based upon the zalzalian tetrachord /1 2 3- 4/ and, in the case of Ibn Kurr, confined to it. His definitions may well be concerned, at least in some cases, with a characteristic modal nucleus, and to that extent should not always be regarded as a straitjacket within which the melody was confined, but that leaves open the question whether further melodic development might normally have been above, below or both, although given the emphasis on the derivation of secondary modes by extension upward we may assume that this would be the most likely strategy, in which case his version of *ra’s al-hank* maps appropriately onto the lower tetrachord al-Urmawī’s /1 2 3- 4/ + /1 2 3- 4 5/ octave scale. In any event, for this mode Ibn Kurr’s definition corresponds well enough to the Systematist one, and to the extent that it allowed for upward extension it is reasonable to suppose, particularly in view of the dominance of the *rast, dū kā h* and *sā kā h* notes, that it would have explored the parallel tetrachord above, thus approaching al-Urmawī 's version even closer.

With *'irā q* , on the other hand, we find that the core element in the Systematist definitions, /1 2- 3- 4/ according to al-Urmawī and /1 2- 3- / according to Šī rā zī , [5] seemingly fails to be replicated in Ibn Kurr's account. In their place we find /1 2- 3♭ / and /1 2- 3♭ 4/, which for the Systematists are associated with different modes. But there is, again, further information, for after the final ascent, e f+ g a, Ibn Kurr tells us that *'irā q* will descend onto *ḥ ijā zī* ending on c+, presumably therefore proceeding with g f+ e d c+, so that although we are presented in this case with a quite different core structure it is rounded off with material that can be equated with the basic trichord or tetrachord of the Systematists, thus providing at least a tenuous link between the two accounts:

c+ d e f+ g
/1 2- 3-/
/1 2- 3- 4/

To this should be added that the characteristic tetrachord of *'irā q* is also for al-Urmawī a significant element of *ḥ ijā zī* , so that there is the possibility that what is involved here is less a significant difference in modal structure than a regional variation in nomenclature (and perhaps also segmentation).

6.2.2 zī **lakand** *and iṣ bahā n*

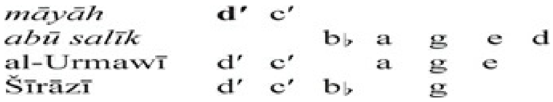
After the interlude of the 'number' modes, Ibn Kurr continues with a further two that he, along with al-Irbilī , regards as forming a basic group of four together with *ra's al-hank* and *'irā q* , and in both cases there are clear resemblances to the corresponding nuclear elements as defined by the Systematists. For *zī lakand* , indeed, there is virtual identity: Ibn Kurr offers a b- c′ c+′ c′ b- a, al-Urmawī a b- c′ c+′ (while reserving an almost identical rising–falling shape for the closely related *šahnā z* [5.10.2]): both authors, then, give the same distinctive modal unit, with its three intervals compressed within the range of a neutral third.

With *iṣ bahā n* the similarity is equally apparent: Ibn Kurr's g a b- c′ d=′ d′ pitch set maps precisely onto the upper pentachord of al-Urmawī 's *iṣ bahā n* octave, which Šī rā zī also gives as a separate entity and terms, significantly, *iṣ fahā n-i aṣ l* ('basic *iṣ fahā n* '). It may be noted, further, that to the tentativeness of the d=′ notation corresponds a certain ambiguity in the Systematist equivalent: the standard theoretical division of the whole tone would suggest d-′, but context points rather to c# ′, and this is confirmed by the ratios supplied by Šī rā zī , which should be regarded as more reliable and define the two upper intervals of *iṣ fahā n-i aṣ l* as virtually equal. [6]

6.2.3 **mā yā h, abū salī k, nawā , 'uššā q**

Thus far, then, underlying commonalities can be detected even in the absence of overt correspondences, so that it would appear to be a case of fundamentally kindred, or indeed identical, structures being viewed from markedly different perspectives. With the remaining four, however, the resemblances become more sporadic and fleeting. In place of al-Urmawī 's *ḥ ijā zī* , as noted previously, al-Irbilī includes *mā yā h* in the set of 12 primary modes, and it is the same conceptualization, even if not made explicit, that must have led Ibn Kurr to make *mā yā h* the first of the remaining *hank* modes. For al-Urmawī it is an *ā wā z* consisting of five notes, while Šī rā zī claims that the norm – to which, he insistently adds, al-Urmawī 's own compositions also adhered – was, rather, four, [7] and their definitions may be stated as e g a c′ d′ and g b♭ c′ d′ respectively. But to these correspond, according to Ibn Kurr, just two notes, a prominent d′ followed by c′, and we find that the identity of Ibn Kurr's *mā yā h* becomes even more opaque when we turn to the various combinations in which it occurs, *ḥ iṣ ā r al-mā yā h, mā yā h al-ḥ usaynī* and *mā yā h abī salī k* . For the first, three notes are mentioned, d′ e-′ and f′, for the second two, /2 3-/, while the third appears, straightforwardly, to be (the original two notes of) *mā yā h* followed by *abū salī k* . We thus have in two of the three a difference both of direction and size of interval, and it appears that in the second the only common factor is the number of notes, although if one takes account of the fact that the similarly disparate sets of notes labelled *ḥ iṣ ā r* are all in a high register, the possibility might be entertained that the crucial element is the prominent d′ of *mā yā h* , serving in the first case to fix one of the pitch positions at which *ḥ iṣ ā r* could occur and, in the second, to specify a particular pitch position for *ḥ usaynī* , with /2 3-/ = /d′ e-′/.

To observe that the Systematist versions of *mā yā h* can be positioned so as to include the d′ – c′ whole tone is, it hardly needs saying, no indication of a close or, indeed, any kind of relationship. Yet matters become rather more interesting when we take account of their exceptional pentatonic nature and confront them with Ibn Kurr's *mā yā h abī salī k* combination:



māyāh	d′	c′					
abū salīk			b♭	a	g	e	d
al-Urmawī	d′	c′		a	g	e	
Šīrāzī	d′	c′	b♭		g		

This raises, again, the question whether similar modal material is being segmented in different ways, but it also points towards the general issue of the nature of the relationships between these modes, three of which are grouped together by al-Urmawī , and all four of which are linked by Ibn Kurr in performance sequences.

Again at some considerable remove from the Systematist version is Ibn Kurr's account of *abū salī k* . It is described by al-Urmawī as an octave scale with parallel /1 2♭ 3♭ 4/ diatonic tetrachords, whereas for Ibn Kurr it calls upon the pitches d e g a b♭ . The most obvious point of resemblance is thus a negative one: in neither case do we encounter the otherwise so prevalent neutral intervals. Beyond that, it would certainly be possible to suggest the following speculative correspondence, which requires, in effect, the Systematist disjunctive whole tone to be relocated:

d e g a b♭
7♭ /1 2♭ 3♭ 4/1 2♭ 3♭ 4 5/

but its implausibility is reinforced by the fact that it would be easier to map Ibn Kurr's *abū salīk* onto al-Urmawī 's *nawā* :

d e g a b♭
/1 2 3♭ 4/1 2 3♭ 4 5/

while between this and Ibn Kurr's conception of *nawā* the gap is equally dramatic. Indeed, the latter might be thought to bear a rather greater resemblance to al-Urmawī 's version of *mā yā h* :

al-U *nawā* /1 2 3♭ 4/1 2 3♭ 4 5/1 2 3♭ 4/1 2 3♭ 4 5/
IK *nawā* B e g a c′ d′ f′ g′ b♭′/
al-U *māyāh* e g a c′ d′

while the upper b♭′ suggests if anything that a better match for Ibn Kurr's *nawā* would be a reduplication of al-Urmawī 's *abū salīk* (and the same conclusion would be indicated if the initial B were instead equated with 1).

Absent from Ibn Kurr's account are thus the two diatonic tetrachords /1 2♭ 3♭ 4/ and /1 2 3♭ 4/ associated by al-Urmawī with *abū salīk* and *nawā* respectively. Equally absent is the last of al-Urmawī 's diatonic tetrachords, /1 2 3 4/, which characterizes his definition of *'uššā q* (/1 2 3 4/1 2 3 4 5/), and even if the unit one could abstract from Ibn Kurr's version, /1 2 3- 3/, does contain 1, 2 and 3, the two are fundamentally different. There is thus no very close match for any of the three diatonic modes that al-Urmawī places at the head of his *šadd* set: in one case the equivalent is pentatonic, in another at least partly so, while the third is non-diatonic and structurally quite unrelated. In short, we encounter a complete absence of diatonic tetrachords where they might most be expected – even if it is an absence that makes it easier to understand Ibn Kurr's hierarchical classification of the notes whereby 3♭ and 3, needed to produce diatonic tetrachords, are relegated to the status of half notes. Further, there is nothing in Ibn Kurr's definitions to suggest that *abū salīk, nawā* and *'uššā q* formed a subset in the same way that they obviously do for al-Urmawī , or, indeed, were at all related to each other. Paradoxically, however, it cannot be fortuitous that his accounts of them are again juxtaposed and, even more significantly, that he informs us that there was a standard sequence for performing them together, first *abū salīk* , then *nawā* , and finally *'uššā q* . Yet there is no obvious structural reason for this, since although it is possible to argue that the first two have significant elements in common (both use gapped scales dominated by whole tone and minor third steps) their connection with the third seems non-existent: it begins far below the finalis of *nawā* , and uses for the most part intervals smaller than a whole tone, so that its presence in the sequence appears quite arbitrary. As al-Urmawī 's reordering of the *šadd* set, giving precedence to these three, represents a dramatic departure from previous conceptualizations, one might wonder whether it was a deliberate attempt to foreground a new order imposed on what Ibn Kurr's descriptions would suggest was a rather recalcitrant reality, creating in effect a diatonic group to counterbalance the basic zalzalian tetrachord set out of two modes void of neutral intervals and a third from which the otherwise unavailable diatonic /1 2 3/ could be extracted. However, although al-Urmawī was certainly capable of making adjustments to make practice fit theory, it would be unwise to suppose that he was working from versions of these modes more or less identical to those described by Ibn Kurr: it has been seen in the case of *mā yā h* that Šī rā zī was perfectly capable of contradicting al-Urmawī 's version, yet he accepted the other three without demur, adding, indeed, an extended version of *abū salīk* covering octave + tetrachord. [8] Of the combinations involving them that Šī rā zī lists, *'uššā q* and *rā st, 'uššā q* and *jā rkā h* , and *'uššā q* and *abū salīk* a major third higher, the first two, it could be argued, work equally well with both forms, but the third surely makes better sense, assuming a preference for pairings involving more rather than fewer consonant relationships, if it involves the Systematist versions (yielding /1 2 3 4/ + /3 4 5 6/ as against /1 2 3- 3/ + /3 4# 6 7 1′/). There is no example of a combination with *nawā* , but from this nothing can be inferred about its structure – it may, simply, have been somewhat marginal. It thus seems that in the case of al-Urmawī 's three diatonic modes it is difficult to argue that fundamental similarities may have been masked by theoretical preconceptions. With *abū salīk* and *nawā* a plausible way of making connections would be to assume that Ibn Kurr's versions retained pentatonic elements that had become archaic elsewhere, being replaced by diatonic fillers, while for *'uššā q* , in addition to an analogous extension to form a diatonic tetrachord, it would need to be argued that in order to achieve this regularization the opposite process also took place, the abandonment of smaller intervals in favour of larger.

6.3 The *ṣawt/šadd* modes; *zankulā ; ḥijā zī*

Of the remaining *šadd* modes, three are assigned by Ibn Kurr to the *ṣawt* category, while a fourth, *zankulā* , is not given a class designation. Consideration may also be given at this juncture to *ḥijā zī* , usually by this period considered one of the *ā wā z* modes, and so too, despite his objections to the group, by Ibn Kurr, but categorized by al-Urmawī , who exchanges *mā yā h* for it, as a *šadd* .

6.3.1 **buzurk, rahā wī** *and ḥusaynī*

For Ibn Kurr *buzurk* consists initially of just three notes, /1 2= 2/, which are then extended by implication to /7 - 1 2= 2 3-/, while al-Urmawī gives, as usual, a whole octave. In an attempt to narrow the gulf between them one might refer to the fundamental importance of an eponymous pentachord within the Systematist definition, called *buzurg-i aṣl* ('fundamental *buzurg* ') by Šī rā zī , and note that Ibn Kurr's three-note kernel maps onto its upper whole tone, but it is clear that as a connection this is still tenuous in the extreme, especially as the Systematist theorists are explicit in their references to a somewhat exceptional, and therefore significant, feature, the presence in the *buzurk* pentachord of a larger than whole tone interval in the tetrachord below.[9] It is tempting, in this context, to note the further reference by Ibn Kurr to *ḥijāzī*, and anticipate a convergence by adding it below his nuclear definition of *buzurk* to yield a close approximation to the Systematist pentachord. But the emergence within the *ḥijāzī* tetrachord of a larger than whole tone interval, noted by Šīrāzī, fails to be recognized by either al-Urmawī or Ibn Kurr, and it is in any case impossible to extract a vertical arrangement of elements from Ibn Kurr's reference, which here relates not to an extension but to an overlap, with *ḥijāzī* providing a frame within which *buzurk* can be inserted or, as Ibn Kurr puts it, 'concealed', so that we are left with a maximum of five notes. These could be arrayed alongside one of the octave scale forms of *buzurk* given by Šīrāzī:

Šīrāzī	/1	2-		3	4	5=	5	6-	7♭	7	1'/
Ibn Kurr			/3-		4	5=	5	6-/			

but with the other and probably more mainstream variants the degree of congruence is less, leaving no more than a divided whole tone as the hypothetically common element. To be noted, also, is the semantic disjunction: for the Systematists there is a contrast between (the Persian terms) *buzurg* ('large'), referring to the basic unit /1 2- 3 4 4# 5/ and *kūček* ('small'), a variant name for *zīrafgand*[10] /*zīlakand*, i.e. the unit /1 2- 3♭ 3-/, while for Ibn Kurr there is no such contrast, and the original sense of *buzurk*, which now applies to a mode the nuclear element of which is even smaller than *zīlakand*, has evidently been lost.

For *rahāwī*, al-Urmawī again gives an octave scale, but as he also attaches the name to a (seemingly unrelated) unit spanning less than a fourth the omens seem rather more propitious for encountering, if not identity, at least similarity. But in the event the two definitions do not match too well: Ibn Kurr offers the notes /2= 2 3- 4/, al-Urmawī /1 2- 3♭ 3/[11] which, transposed, would become /2♭ 2+ 3 4/. The fit is thus rather inexact, and the position, from a Systematist perspective, unusual: for Šīrāzī *rahāwī* lies primarily from 1 to 3, and the other position at which it appears, 4 to 6, does not improve matters. Nevertheless, given the gulf separating the competing versions of certain other modes it is important to note here at least a degree of propinquity in the number of notes and the restricted range.

With *ḥusaynī*, we revert to the juxtaposition of an octave scale and a definition confined within a much narrower compass, a sinuous melodic contour within which, furthermore, the /1 2 3- 4/ tetrachord seems to be prominent rather than the /1 2- 3♭ 4/ that one would expect from a comparison with the Systematist version, in which the prominent element is the eponymous /1 2- 3♭ 4 5/ pentachord. It is certainly possible to point to the final /4 3- 2/ descent in Ibn Kurr's account as a possible point of resemblance, but that greater weight attaches to /1 2 3- 4/ is supported by the comment attached to *sākāh*, defined as /1 2 3-/, to the effect that if 1 is the finalis it becomes *ḥusaynī*. In short, the pitches defined by Ibn Kurr can be mapped onto the Systematist scale, but their modal properties signally fail to match.

6.3.2 zankulā

Although one of the first modes to be mentioned, being contrasted with *ra's al-hank, zankulā* is not counted among the *hank* modes, and it is indeed specifically regarded as in some sense 'weaker' than *ra's al-hank*. Yet it is discussed alongside it, and was evidently considered sufficiently similar to warrant being carefully differentiated from it – and the same need for differentiation recurs in relation to *jārkāh*. Ibn Kurr's definition is restricted to a rising 1 → 4 line traversing the /1 2 3- 4/ tetrachord, thus suggesting, in parallel to its relationship to *ra's al-hank*, a connection with the Systematist *rāst* tetrachord, which constitutes the lower tetrachord of al-Urmawī's octave-scale representation of *zankulā*, where we find added to it /1 2- 3- 4/ above (the corresponding tetrachord in Šīrāzī's account being /1 2- 3 4/), with the octave being rounded off with one or two further notes, /(5=) 5/. However, these notes fail to appear in the fairly extensive passage of notation supplied by Šīrāzī, which suggests that their inclusion in al-Urmawī's octave-scale conception may have been a somewhat artificial padding out.[12] The melody in this passage oscillates around a strong centre of gravity provided by the note that links the two tetrachords, and although the 1 → 4 ascent though the lower tetrachord deemed characteristic by Ibn Kurr does occur, it is hardly a prominent and certainly not a determining feature. Yet despite the fact that there is no trace of an upper tetrachord in Ibn Kurr's primary definition, he does provide further information that helps to bring the two versions closer together, both by implying the possibility of adding 5= and, more crucially, by mentioning in the course of his discussion of *jārkāh* that *ḥijāzī*, which he redefines, transposed, as /1 2= 3- 4/, occurs above *zankulā*, the two combined thus coinciding with the pitch range suggested as typical by Šīrāzī's notation:

Ibn Kurr	/1 2 3- 4/1 2= 3- 4/
Šīrāzī	/1 2 3- 4/1 2- 3 4/

To the extent that the continuation with *ḥijāzī* was habitual, the resemblance between the resulting conception of *zankulā* and that vouchsafed by the notation is thus much greater than anything suggested by the original theoretical formulations. It is as if the definition of this mode given by the Systematists cements together (and extends) what for Ibn Kurr may have been perceived, rather, as a possibly normative but not necessarily obligatory combination of autonomous elements.

6.3.3 ḥijāzī

With *ḥijāzī* alone, in contrast, the connection is clear: both Ibn Kurr and al-Urmawī relate it to the /1 2- 3- 4/ tetrachord, although the latter, as usual, provides an octave scale with conjunct tetrachords, or indeed, in the case of this particular mode, two, in one of which the same tetrachord is repeated while in the other the lower tetrachord is /1 2- 3♭ 4/. Although probably written some 30 years after the *durrat al-tāj*, there is no trace in the *ġāyat al-maṭlūb* of the /1 2- 3- 4/ → /1 2- 3 4/ development that Šīrāzī records, and the fact that Ibn Kurr situates the tetrachord between two *sākāh* notes (e.g. f+ g a b-) means that its internal notes are produced by the open string and the first finger fret on the *ʿūd*, and consequently seem particularly stable. Most later Systematist texts adhere to the /1 2- 3- 4/ representation, so that we need to wait until al-Lāḏiqī to encounter further evidence for the diffusion of the now characteristic larger than whole tone interval of *ḥijāzī*.[13]

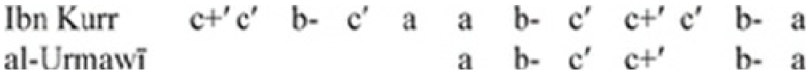
The final item in this review of the competing versions of what for al-Urmawī are the *šadd* modes, *ḥijāzī* is one of those where they are closest, always accepting that we are dealing not with al-Urmawī's octave scales but normally with a smaller constituent element thereof. Elsewhere, however, it is apparent that there are considerable variations in the degrees of resemblance that can be identified – or argued for with greater or lesser plausibility. The similarities are most obvious with *rāst/ra's al-hank, zīlakand* and *iṣbahān*; with *zankulā* and *rahāwī* rather less so; for *'irāq* and *ḥusaynī* a degree of special pleading is required; and with *buzurk, abū salīk, nawā* and *'uššāq* only the most tenuous of connections can be established, if that. Given that we are dealing here with the most prominent set of modes, those for which one would assume an agreed form to have particularly wide currency, the frequent lack of congruence between the competing versions is thus rather disconcerting, and to make matters worse one may add that for *māyāh*, which other authorities continue to include in the *šadd* set and which for Ibn Kurr is a *hank*, his version appears quite unrelated to those of the Systematists.

6.4 The *āwāz* modes

Nearly all the remaining modes described by both Ibn Kurr and al-Urmawī belong to what is for the latter the *āwāz* group. Within this second and chronologically later constellation one might, accordingly, expect a similar or even greater lack of congruence. A potential for difference would in any case be suggested by the very diversity of the structures cited by Systematist theorists for the *āwāz* modes, to which may be added the fact that even membership of the class seems to be subject to dispute: thus in addition to the *māyāh/ḥijāzī* switch, Ibn Kurr includes *zirkašī* in preference to al-Urmawī's *kardāniyā*, but then adds the latter, recognizing that according to some it replaces the former (thus leaving *kawašt, kawašt, salmak* and *šahnāz* as the ones about which there is a consensus). However, when we turn to the descriptions we find, paradoxically, that in most cases there are evident resemblances, for all their differences of approach, between what we can understand of Ibn Kurr's versions and those of al-Urmawī.

With *nayrūz*, indeed, we can identify a fully equivalent form, for the notes used[14] coincide with what for the Systematists is the *nawrūz* tetrachord /1 2- 3♭ 4/. They define the mode as a whole as consisting of two conjunct *nawrūz* tetrachords, but the fact that Šīrāzī marks the lower as prominent renders likely the notion that just one was sufficient to establish modal identity. Ibn Kurr defines *nayrūz*, along with *kardāniyā*, *kawašt* and *zirkašī*, as a *murakkab*, but whereas for some of the others there is clear reference to a combination of elements, in this case it is difficult to see what the justification might be.

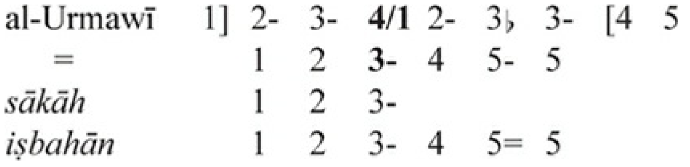
With *šahnāz*, the Systematist definition relates it to the unit /1 2- 3♭ 3-/, called *zīrafgand*, either in the form of a melodic arch, /1 2- 3♭ 3- 2- 1/ (al-Urmawī), or reduplicated, /1 2- 3♭ 3- 4 5- 5/ (Šīrāzī): it is thus either a particular melodic variation, or an extension, of what Ibn Kurr terms *zīlakand* and defines as a melodic arch similar to al-Urmawī's *šahnāz*, thus suggesting the possibility of a simple switch of names for related entities, one generic, the other more specific. However, *šahnāz* for Ibn Kurr is actually more extended that his version of *zīlakand*, which, indeed, it incorporates, so that it contains considerably more material than al-Urmawī's version:



Ibn Kurr	c+′	c′	b-	c′	a	a	b-	c′	c+′	c′	b-	a
al-Urmawī						a	b-	c′	c+′		b-	a

Despite this, it is clear that these two forms are closely related, while when we turn to the more extended form noted by Šīrāzī[15] similarity strengthens to identity, for exactly the same reduplication is found in the second version described by Ibn Kurr.

With *kawašt*, given the lack in Ibn Kurr's account of an explicit identification of the notes involved, evidence for a correspondence with the Systematist version is not immediately apparent, yet a plausible, if somewhat conjectural, case for the two being related can nevertheless be made. Ibn Kurr cites two constituent elements, *sākāh* and *iṣbahān*, from which we may abstract /1 2 3- 4 5= 5/ as the notes used, and at first sight the Systematist octave-scale version, /1 2- 3- 4/1 2- 3♭ 3- 4 5/, seems to have absolutely nothing in common with this: what allows us to link the two, while at the same time issuing a salutary warning about the potential danger of taking theoretical definitions at face value, is the example of notation in *kawašt* that al-Urmawī includes in the *kitāb al-adwār*.[16] While evidently to be treated with caution, since a single relatively brief sample cannot be expected to encapsulate all its modal properties, the main features it displays may reasonably be considered characteristic. These are, as with *zankulā* before, that the melody oscillates around a pivotal note, having the form of a rising–falling–rising curve centred upon a clearly prominent 4 (which is also initial and final). It may also be noted that the bottom note and the top two notes of the theoretical octave never appear,[17] and if we set these aside we find that what remains matches Ibn Kurr's ingredients perfectly:



al-Urmawī	1]	2-	3-	**4/1**	2-	3♭	3-	[4	5
=		1	2	**3-**	4	5-	5		
sākāh		1	2	3-					
iṣbahān		1	2	3-	4	5=	5		

and it has been suggested that we might wish to see in the apparently redundant reference that Ibn Kurr makes to *sākāh* a covert indication of the prominence of 3- as the melodic fulcrum of *kawašt*.

Ibn Kurr's description of *kardāniyā* mentions even more elements: for him it draws successively upon *jārkāh, rahāwī* and *banjkāh*:

jārkāh				/1	2	3-	4	5=/
rahāwī	/$\underline{6}$=	$\underline{6}$	$\underline{7}$-	1/				
banjkāh		/$\underline{6}$	$\underline{7}$-	1	2/			

In contrast, al-Urmawī again gives a definition in terms of an octave scale, best analysed, contrary to his prescriptive model, as pentachord (below) + tetrachord: /1 2 3- 4 5= 5/1 2 3- 4/. The similarity between the pentachord and the pitches used in *jārkāh* is obvious, and if the upper tetrachord is moved down an octave there is an almost complete overlap with the range of notes used in the three constituent elements named by Ibn Kurr:

al-Urmawī	/$\underline{5}$		$\underline{6}$	$\underline{7}$-	1	2	3-	4	5=	5/
Ibn Kurr		/$\underline{6}$=	$\underline{6}$	$\underline{7}$-	1	2	3-	4	5=/	

This would point to slightly different ways of producing modal variations around the /1 2 3- 4/ tetrachord, with the extension above approaching *iṣbahān* (and a derivational connection can readily be established between Urmawī's octave-scale definitions of *iṣbahān* and *kardāniyā*).[18] However, it should be noted that there is nothing in the Systematist accounts to point to the inclusion of a *rahāwī* element, although it is clear from Šīrāzī's listing of four versions of *kardāniyā* that various combinations were possible, and that no single one had established itself as the optimal shape.

Ibn Kurr's definition of *salmak* is couched in terms of a transposition of a reduced form of *jārkāh* positioned in relation to the highest note of *iṣbahān*, but that it consisted of a combination of *jārkāh* with *iṣbahān* seems unlikely. Reconsideration is, though, suggested by the fact that Šīrāzī likewise refers to two elements, one transposed: for him it is a particular (and presumably restricted) form of *zankulā*, followed by a transposition of *banjkāh*, and it would certainly be reasonable to entertain the hypothesis that we are confronted here by a change of nomenclature resulting from different ways of analysing a complex entity: as with *kawašt*, it is entirely plausible that variations in perceptions of modal identity could disguise what are fundamentally cognate, if not indeed identical, structures. However, although the virtual identity of *banjkāh* and *iṣbahān* in terms of pitch resources would support such a conclusion:

Ibn Kurr	*jārkāh*								d’	e-′	e′		g′
	iṣbahān	g	a	b-		c′		d=′	d′				
Šīrāzī	*zankulā*				b		c+′		d′	e-′		f♯′	
	banjkāh	g	a	b-		c′		(d=′)	d′				

it must be emphasized that Ibn Kurr's text certainly does not assert, and hardly even suggests, the presence of *iṣbahān*, so that we are left with little save a possibly coincidental reference to two modes, *zankulā* and *jārkāh*, which were evidently close enough to each other for Ibn Kurr to need to spell out what separated them. A connection, in short, between the two descriptions of *salmak* cannot be established; and al-Urmawī's definition also seems quite unrelated to Ibn Kurr's: if anything, it could be construed as a telescoping of the two parts described by Šīrāzī that avoids giving both versions in the area of overlap where they differ:

[*zankulā*]			b	c+′	d′	e-′
[*banjkāh*]	g	a			d′	

With *salmak* we reach the last of al-Urmawī's set of six *āwāz* modes, but that still leaves *zirkašī* which, Ibn Kurr informs us, is preferred by some to *kardāniyā*. However, al-Urmawī makes no mention of it, so that the only Systematist term of reference is the species that Šīrāzī calls *zīrkašḥusaynī*. Despite the uncertain nature of the interpretations offered for Ibn Kurr's versions, the first strongly suggests the likelihood of a connection, as five of the six pitches match:

Šīrāzī	/1	2-	3♭	3	4	5/
Ibn Kurr	a	b-	c′	d=′	d′	f′

Ibn Kurr's second version, on the other hand, is rather more distant.

6.5 *muḥayyir*

There are two other modes mentioned by al-Urmawī, *nihuft al-ḥijāzī* and *muḥayyir al-ḥusaynī*, of which only the latter has a cognate in the *ġāyat al-maṭlūb*, referred to by Ibn Kurr simply as *muḥayyir*. The fuller form of the name reveals a derivation from *ḥusaynī*, and there is a clear relationship between the two octave scale forms in which al-Urmawī presents them:[19] each, to follow the indications of prominence supplied by Šīrāzī, contains a characteristic /1 2- 3♭ 4 5/ pentachord, placed above the additional and related /1 2- 3♭ 4/ tetrachord in *ḥusaynī* and below it in *muḥayyir al-ḥusaynī*. In contrast to *zankulā* and *kawašt*, where the evidence of the notations runs counter to the octave format, suggesting different modal characteristics, in this case it is confirmed by the extensive example of notation included by Šīrāzī, where *muḥayyir al-ḥusaynī* is in fact the principal mode: the melodic contour descends from the upper octave note to the lower, although, as yet another indication of how practice can deviate from theory, it includes various ancillary pitches not recognized in the model.

As might be expected, there is no hint of an equivalent octave structure in Ibn Kurr's account, and if we assume the existence of a parallel relationship between *muḥayyir* and the form of *ḥusaynī* that he presents, in which the /1 2 3- 4/ tetrachord appears predominant, the result could hardly be expected to foreground the /1 2- 3♭ 4 5/ pentachord. However, the derivation proposed by Ibn Kurr is not from *ḥusaynī* but from *nayrūz*, which relates to the /1 2- 3♭ 4/ tetrachord and is thus much closer to the Systematist *ḥusaynī*. Not accorded a section of its own, *muḥayyir* in fact only surfaces briefly at the end of the *nayrūz* section: it was presumably regarded as a somewhat peripheral entity, and was certainly considered a secondary, derived form, for we are told that it is, in effect, *nayrūz* transposed down a fourth. Not only, then, do we have a mode based upon the/1 2- 3♭ 4/ tetrachord, but the *muḥayyir* low–*nayrūz* high relationship echoes the Systematist *muḥayyir al-ḥusaynī* low–*ḥusaynī* high, both pairs being a fourth apart.

6.6 Ibn Kurr and Šīrāzī

6.6.1 The number set

Although the above exhausts the comparisons that can be made between Ibn Kurr and al-Urmawī, there are several further mode names common to both Ibn Kurr and Šīrāzī. We may begin with the number set, where of the six included by Ibn Kurr the first four (*dūkāh, sākāh, jārkāh, banjkāh*) are described by Šīrāzī, who includes them within a group of nine termed *šu‘ba* ('branch'), an evident allusion to their perceived status as derived forms.

Indeed, Šīrāzī is at pains to explain how they evolved. All are offshoots of the mode *rāst*, arrived at by shifting the modal focus progressively upwards from the prominent fourth (understood, the nomenclature implies, as 'note 1', *yakāh*), so that in *dūkāh* the focal point for melodic development is the now prominent 2 (that is, 5 in *rāst*), which also serves as initial and finalis.[20] Typologically, therefore, *dūkāh* resembles *zankulā* and *kawašt* in its oscillating modal characteristics, while its range, expressed in relation to the renumbering of 5 as 2, is largely confined to /7̲ - 1 2 3- 4/, or at least was so originally, for Šīrāzī concedes that contemporary musicians might extend it somewhat. The risk of such extension is confusion with other modes, /6̲ 7̲ - 1 2 3- 4 5/, for example, being divisible in two /1 2- 3♭ 4/ tetrachords and thus coinciding with *nayrūz*, but this is avoided precisely by the difference in modal morphology. Another such potential overlap mentioned by Šīrāzī, that with *iṣbahān*, involves the use of an extra pitch, evidently an optional addition, omitted from the theoretical account of the *rāst* octave scale, that involves a division of the upper disjunctive whole tone, corresponding, in the new numbering, to a division of the /4 5/ whole tone. It is precisely such a division that appears, after the initial definition in terms of just the basic notes 1 and 2, in both of Ibn Kurr's versions of *dūkāh*, with the second using the notes /1 2 3- 4 5= 5/ while the first version (the wording of which suggests that the division of this whole tone was considered a distinguishing feature) is positioned a fourth lower. Thus although the melodic movement indicated does little more than hint at an oscillating contour, it is clear that Ibn Kurr's versions are readily relatable to Šīrāzī's description of *dūkāh*. However, it should not be thought that Ibn Kurr arbitrarily set at different relative pitches two versions that would be performed at the same pitch: a straightforward reading of the text indicates that the divided whole was not restricted to one position, as, seemingly, with Šīrāzī.

With *sākāh*, similarly, Ibn Kurr begins with just three basic notes, /1 2 3-/, but with the caveat that if 1 is both initial and finalis the mode becomes *ḥusaynī*. Šīrāzī, on the other hand, in saying that it resembles *dūkāh* (that is, in articulation), suggests that the melody should revolve around 3-, which would normally be both initial and finalis, and again not stray too far from it, so that the nucleus would be /1 2 3- 4 5/. He also refers, as before, to the possible division of the /4 5/ whole tone, which would cause, we are told, a potential overlap with *iṣfahānak*, defined as /7- 1 2 3- 4 5= 5/, when the range is extended, and with *zīlakand*, /3- 4 5- 5/, when it is not. For Ibn Kurr, the same division is implied by the possible (and presumably standard) overlap of *sākāh* and *iṣbahān*, suggesting something akin to the relationship with *iṣfahānak* mentioned by Šīrāzī:

sākāh /1 2 3-/
iṣbahān /1 2 3- 4 5= 5/

With *jārkāh*, Šīrāzī comments on its similarity to *rāst*, suggesting that melodies in this mode may have ventured a little further away from the fulcrum of 4, perhaps covering the range /1 2 3- 4 5 6 7-/. As expected, 4 is stated to be prominent, but so is 1; and 2 is an optional finalis. There is no mention of the division of the /4 5/ whole tone that Šīrāzī implies is available in *sākāh*, but his silence does not necessarily entail exclusion, and this feature is integral to Ibn Kurr's account of *jārkāh*. This is by no means wholly clear, but it certainly implies the existence of a conventional set of melodic gestures involving an initial 1 to 4 move, thus emphasizing the pitches singled out as prominent by Šīrāzī, and apart from the explicit inclusion of 5=, the pitches used in its maximal form, /1 2 3- 4 5= 5 7♭/, differ from those suggested for Šīrāzī only in the somewhat hypothetical higher range.

For *banjkāh* Ibn Kurr gives five notes, /1 2 3- 4 5/, articulated as a straightforward descending line, thereby coming even closer to Šīrāzī's brief account, which remarks once more on a resemblance to *rāst* occasioned by the consonant relationship between 1 and 5, and notes that the normal finalis is 1. Neither theorist mentions the possibility of dividing the /4 5/ whole tone, even though it is recognized by later authorities, who distinguish indeed between two forms, one with the divided whole tone, the other without.[21]

6.6.2 zāwilī *and* mubarqa‘

For Šīrāzī the number series ends with *banjkāh*, so that there are no terms of comparison for Ibn Kurr's *šaškāh* and *haftkāh*, logical (if in the latter case unpredictable) extensions of this process of modal derivation. However, there are a further two modes, assigned by Šīrāzī to the same *šu‘ba* class in which he places the number modes, that are also described by Ibn Kurr. In the case of *zāwilī* they are in fairly close agreement: both regard it as related to *sākāh* or, indeed, as a particular form of it, but whereas for Ibn Kurr a characteristic feature is that the finalis is 2, *dūkāh*, for Šīrāzī it can be either 2 – but lightly touched (*bi-iḫtilās*) – or 1.

For *mubarqa‘* Ibn Kurr provides a similar derivation, describing it as *jārkāh* with *sākāh* as finalis, while Šīrāzī sees it as derived from the quite different seeming *iṣfahānak* by restricting its range and altering its modal characteristics. Thus if *iṣfahānak* is represented as /1 2- 3- 4 5- 6♭ 6-/, with prominence accorded to 4 and the area above, in *mubarqa‘* 5- is prominent, and the range is restricted to one or two notes on either side. However, there is one feature shared with Ibn Kurr’s account, the preference for a note (in this case 4) as finalis that is one step lower than the prominent note (the alternative for Šīrāzī being 3-, but lightly touched – although he does concede that musicians may venture to draw it out), and if we follow this hint and align the pitches accordingly, the two versions can, up to a point, be reconciled, with 3- the preferred finalis in both:

Ibn Kurr	/1	2	3-	4	5=	5	[7♭]/
Šīrāzī		/2	3-	4	5=	5/	

6.6.3 al-bastāh, nikārī *and* ḥiṣār

Šīrāzī also reports that an alternative name for *iṣfahānak* is *basta*, while a century later Marāġī discriminates between them, preferring the name *basta* (*nigār*) for the modal configuration suggested by Šīrāzī’s indications of prominence in *iṣfahānak*, while reserving the latter name for a form characterized by beginning on the upper note. This suggests the possibility of links with *al-bastāh* (5.8.4.2) and *nikārī* (5.12.1), although as it is not wholly clear what Ibn Kurr meant by them comparison is difficult. Nevertheless, tentative as the case must be for a relationship between three versions two of which are uncertain, we may note once more the use of the divided whole tone as a common element, while if Šīrāzī’s *iṣfahānak* is now represented as /7- 1 2 3- 4 5= 5/, the prominent area from 3-upwards coincides with a possible understanding of Ibn Kurr’s *al-bastāh*:

nikārī		/1			4	5=	5	7♭	1='/
al-bastāh				/3-	4	5=	5/		
iṣfahānak/basta/									
basta nigār	/$\underline{7}$-	1	2	3-	4	5=	5/		

Ibn Kurr’s *nikārī*, on the other hand, seems to be fundamentally unrelated.

Another name common to both authors is *ḥiṣār*, but while Šīrāzī gives a quite lucid account that points to the central role in this mode of a /1 2- 3♭ 3- 4# 5/ pentachord, Ibn Kurr seems to associate it with three different pairs of rising intervals, the common element of which is that they start from the same pitch. One of the three pairs does correspond to Šīrāzī’s initial /1 2- 3♭ /, but that is hardly sufficient to establish a connection.

6.7 Derivations

Another area of comparative enquiry concerns concepts of relationships, especially those encapsulating a derivation, whether of one mode generating two others or two generating one, and Ibn Kurr’s strenuous rebuttals of what he brands as mistaken Persian views. If this were no more than an irritated reaction to new-fangled and exotic notions it could be dismissed as an irrelevant example of personal animus, but as these views were evidently accepted by his contemporary al-Irbilī the likelihood is that the general derivational framework was widely accepted, and a question that then arises is whether there was unanimity between them with regard to the identity of the putative parent modes, irrespective of whether the relationship was accepted or rejected.

For al-Irbilī, there is a primary set of four, consisting of *rāst* (= *ra’s al-hank*) and three others derived from it, *‘irāq, zīlakand* and *iṣbahān*,[22] and it is evident from Ibn Kurr’s analysis that he too considers that these four form a primary and interrelated group among which the very name *ra’s al-hank* indicates supremacy. However, he has nothing to say about derivation, and is actually rather ambiguous about the notion of primacy, for he suggests that the term *ra’s al-hank* could also be applied to *‘irāq*. Similarly, he seeks to demonstrate the falsity of Persian claims that *zankulā* is derived from *ra’s al-hank* by saying that it precedes it in derivation (*istinbāṭ*), and should itself be termed *ra’s al-hank* because it is the first of four delightful modes that ascend and descend.[23] Of rather greater factual yield is his seemingly innocuous objection that the Persians put these four modes in the wrong order, with *iṣbahān* third and *zīlakand* fourth, and why he regards this order as wrong is to be inferred from his remarks about the highest notes of these modes, which progress upwards in the order *ra’s al-hank, ‘irāq, zīlakand* and *iṣbahān*. The main point here is not the nature of the information conveyed by this particular parameter – the choice of which may well have been opportunistic – or indeed the cogency of the argument, but the simple fact that it is specifically musicological, and the same is true of the reasons he adduces in the course of his discussion of the other eight *šadd* modes, where he again stigmatizes as Persian errors exactly the derivations accepted by al-Irbilī. Thus against

rāst/ra’s al-hank → *‘uššāq* and *zankulā*

he argues that *‘uššāq* has a different initial note to the others (while shrewdly avoiding any mention of the close relationship between *ra’s al-hank* and *zankulā*, which could readily be construed as derivational); against

‘irāq → *abū salīk* and *māyāh*

he argues that *abū salīk* and *māyāh* have different initial notes (and also, given the initial notes specified, pitch ranges that do not overlap); against

zīlakand → *buzurk* and *rahāwī*

he argues again on grounds of both melodic compass and direction: *zīlakand* proceeds upwards from 2, *buzurk* downwards from 2 to 1, and *rahāwī* downwards from 1, thus demonstrating (*dalla*) that each is an independent (*istaqalla bi-ḏātih*) *ṣawt*; and against

iṣbahān → *ḥusaynī* and *nawā*

he argues that they do not employ the same pitch set: *ḥusaynī* lacks a *ramal* note, and *nawā* lacks both *ramal* and *sākāh* notes, both of which are integral to *iṣbahān*: this similarly demonstrates that each is an independent *ṣawt*.

We then have, in al-Irbilī's presentation, a further set of such relationships, each of the six *āwāz* modes being derived from two of the *šudūd*. That Ibn Kurr was well aware of this conceptualization too is shown by the prominent position given to it in the heading of a chapter which deals, he says, with the note combinations (*tarkīb al-naġamāt*) that the Persians claim are six *āwāz* resulting (*nataja*) from 12, one derived (*far'*) from each pair of original (*aṣl*) modes. The theme is continued at the very beginning of his discussion of the first *āwāz*, for which the derivation attributed to the Persians:

rāst + *'irāq* → *nayrūz*

is exactly that recognized by al-Irbilī. The form of Ibn Kurr's objection is to say that were this true *nayrūz* would begin on 2, as the highest note of *'irāq* is 2 (= a), and so it cannot be an *āwāz* (as we have already been informed that it begins on 1). With the second member of the group, *šahnāz*, in relation to which the rejected derivation:

zīlakand + *iṣbahān* → *šahnāz*

is again that recognized by al-Irbilī, the objection is an inversion of the first: it cannot be an *āwāz* because it ends on 1 whereas *zīlakand* ends on 2 – this despite a clear acknowledgment that *šahnāz* is a derived form (*naġam šawāḏḏī*) using the notes (*buyūt*) of *zīlakand*. Beyond this point, however, Ibn Kurr parts company with al-Irbilī, the remaining derivations he cites being:

'uššāq + *zankulā* → *salmak*
buzurk + *rahāwī* → *kawašt*
nawā + *ḥusaynī* → *zirkašī*
māyah + *abū salīk* → *ḥijāzī*

With *salmak*,[24] the convoluted objection again concerns pitch position,[25] and for *kawašt*[26] the argument is of a similar order. The derivation proposed for *zirkašī*[27] (and similarly for *kardāniyā*, its potential replacement) is dismissed without comment, presumably either because of explanation fatigue or because its fallacious nature is thought too obvious to warrant explanation. With the final member of the set, *ḥijāzī*, on the other hand, we again have specific reasons adduced, and once more they are to do with pitch: *ḥijāzī* lies between two *sākāh* notes while the other two begin from *dūkāh*.

It is worth noting that whereas the enduring appeal of the 12 *šadd* and six (later seven) *āwāz* modes during the following centuries is more than anything owed to the cosmological freight that they can so readily bear, Ibn Kurr makes no mention of such matters. As we have seen, his objections may on occasion seem quirky or forced, but they are solely, and resolutely, musicological, and it is therefore difficult to think that extra-musical concepts could have played a significant rôle, if any, in setting up the relationships postulated: he would hardly have placed such emphasis on a factor that was not central, nor failed to address an issue that was. It is thus likely, assuming that the associations proposed were not random, that certain obvious resemblances, generally of scale type, provided a first layer of notional derivations (e.g. *rāst* + *'irāq* → *nayrūz*), and that when they were exhausted the remainder had to be brought together in increasingly arbitrary ways, consonant with which is the hesitation or lack of agreement indicated by the alternative parental pairings that Ibn Kurr and al-Irbilī provide in a number of cases.[28]

Whether accepted or spurned, such concepts of derivation are thus common to Ibn Kurr and al-Irbilī.[29] However, they have no place in al-Urmawī's treatises, and while Šīrāzī does deal with derivations of a quite different order in his evolutionary account of the genesis of the 'number' modes, he disregards the *šadd* and *āwāz* categories and has nothing to say about relationships between the modes normally regarded as members of them. From this, however, it cannot be concluded that there was an east–west conceptual divide: for Ibn Kurr such ideas were Persian, and they do, indeed, appear in the earlier Persian treatise by Nīšābūrī. Nevertheless, Šīrāzī apart, Systematist theorists generally follow al-Urmawī in ignoring derivations while foregrounding an arrangement of the 12 *šadd* modes based on structural similarities. They thus accept the new order in which he placed them, and while extra-musical associations are not entirely absent here, specifically cosmological ramifications only appear much later.[30] A further purely practical set of relationships is the positioning of the *šadd* modes within a set of concentric circles, beginning at different points in such a way as to reduce the total number of pitches used,[31] one thus dictated neither by notions of derivation nor by structural considerations, but simply reflecting the habits of performers.

6.8 Regional variations

Beyond the mode names common to Ibn Kurr and the Systematist theorists, note should also be taken of those common only to Ibn Kurr and al-Irbilī, even if, in the absence of a description by the latter, structural comparisons cannot be made. Thus both authors recognize *ʿukbarī, ṣaʿīdī* and *ramal*, all absent from the Systematist canon, and here we can reasonably point to geographical distribution as the likely cause, for to judge by their names they appear to be modes originating in Arab practice, and probably confined to it: the first relates to a town in Iraq and the second to Upper Egypt, while *ramal* has already been noted as a mode name, unknown in the East, that survives in the North African traditions. But that there may also have been certain regional differences in the nomenclature of modes, and perhaps also in their distribution, as between Iraq and Egypt, is suggested by the inclusion by Ibn Kurr of *sāzkarī*, which al-Irbilī fails to mention, and by al-Irbilī of *mustaʿār, nahrī* and *ḫwārazmī*, which both Ibn Kurr and the Systematists fail to mention.[32] On the Systematist side mention has been made of *nihuft al-ḥijāzī*, cited by al-Urmawī but absent from the *ġāyat al-maṭlūb*, and, not unexpectedly, there are a number of further mode names known to Šīrāzī that fail to appear in it: *humāyūn, iṣfahānak, muḫālifak, nahāwand, rakbī, rū-yi ʿirāq* and *ʿuzzāl*;[33] and Ibn Kurr includes an equivalent number of modes not mentioned by Šīrāzī, for to *ʿukbarī, ṣaʿīdī* and *ramal* may be added *haftkāh, šaškāh* and *sāzkarī*. As neither the *durrat al-tāj* nor the *ġāyat al-maṭlūb* claims to provide an exhaustive inventory certain discrepancies were only to be expected and, as we have seen, Ibn Kurr is quite explicit in pointing to the existence of further modal possibilities beyond those he identifies, so that in theory some or all of the five novel items cited by Šīrāzī may have been included among them, but it is equally possible that they were simply not current among Cairene performers; likewise, Šīrāzī could have let slip through the net modes that only Ibn Kurr mentions, especially in the case of *sāzkarī*, a name of Persian origin.

Thus, if the number of additional modes seems fairly evenly balanced between Ibn Kurr and Šīrāzī, it does not follow that each area provided a similar level of local material. In fact, to make comparisons of the modal population various authors recognize, and of the extent to which they overlap, is not quite a straightforward matter. As has been noted, al-Urmawī does not claim to include the whole modal repertoire, but neither do the others, even though they give much fuller accounts. To the 20 mentioned by al-Urmawī a further six are added by al-Irbilī, but this is still a much smaller total than the 37 we find in the contemporary *ġāyat al-maṭlūb*. However, the number of mode names (some 45) previously noted by Šīrāzī is considerably higher still which, taken at face value, suggests either that Ibn Kurr, too, was not striving to be comprehensive and omitted various rare specimens, or simply that fewer modal entities were differentiated in Egypt than further east. But the situation is complicated somewhat by the fact that Šīrāzī may have recorded as named entities certain combinations that for Ibn Kurr were possible structures, but had not been similarly reified: it is indicative that Šīrāzī notes a number of combinations – evidently ones not in common use – for which he has to suggest names himself, and ignoring these narrows somewhat the gap between them. To judge solely by the distribution of names, a tentative conclusion might be that a shared core of some 30 was supplemented by a further half dozen that may not have circulated beyond a particular and perhaps quite restricted area. Texts occasionally identify one name as a regional alternative to another, but on the basis of the definitions Ibn Kurr offers it is not possible to equate any of the modes that have names peculiar to him with another mentioned elsewhere. Names such as *šaškāh* and *haftkāh* suggest strongly that they are additions to the common stock – and they will, indeed, be cited in later Persian texts, but the others appear to provide fairly reliable evidence for the presence of local area-specific ingredients supplementing a common inter-regional nomenclature.

They do not, however, exhibit any characteristics that might be seen as markers of a local style; indeed, they do not appear to be structurally dissimilar to the modes that are peculiar to Šīrāzī. Specifically, most of these are represented not in terms of the dominant Systematist octave scale format but as smaller entities analogous to those in the *ġāyat al-maṭlūb*, so that, parallel to *ḥijāzī, rū-yi ʿirāq* is confined to the /1 2- 3- 4/ tetrachord; *rakbī* and *ʿuzzāl* have a range of a fifth; and *iṣfahānak* of a neutral sixth; while *humāyūn* conforms to the combinatorial type of modal sequence, being a *tarkīb* beginning in *zankulā* and ending in *rahāwī*. Those particular to Ibn Kurr are typologically akin: *ʿukbarī* has a range of a minor third; *ramal* of less than a fourth; and *sāzkarī* of a neutral sixth; while *ṣaʿīdī* is a combination of two apocopate forms of *abū salīk* with a total range of a minor sixth. Such broad morphological similarity could be read as suggesting that the gradual expansion of the modal repertoire proceeded along rather similar lines in various localities, in other words as an indication of cohesion in the sense of agreement on, or diffusion of, structural types to which the particulars generated would tend to conform.

[1] Wright 1978: pp. 186–7 and 188–9.

[2] Although not quite analogous, one might also juxtapose Ibn Kurr's *māyāh al-ḥusaynī* with the pair *ḥusaynī* and *māya* listed by Šīrāzī.

[3] The case is argued in Wright 1978.

[4] The differences between them with regard to the other names are not so drastic: the forms adopted by Ibn Kurr will be used throughout. If needed, Systematist equivalents may be located in the index.

[5] With the latter being perhaps the more reliable: it both specifies prominent notes and avoids overlap with *ḥijāzī*. See Wright 1978: p. 48.

[6] Even if they form part of a rather artificial division of the a – d′ segment according to which all four intervals are nearly equal, being expressed by superpartial ratios of decreasing size that yield the values 139, 128, 119 and 112 cents respectively.

[7] Wright 1978: p. 56.

[8] Ibid.: p. 78.

[9] Generally calculated at 231 cents, but Šīrāzī adds a variant in which it is appreciably larger, at 267 cents (Wright 1978: pp. 54–5).

[10] The two are also on occasion combined into *zīrafgand(-i) kūček*.

[11] In the *risāla al-šarafiyya*, p. 205; repeated by Šīrāzī (Wright 1978: pp. 48–9).

[12] It may, indeed, have been a way of reinforcing the analysis of the upper tetrachord as /1 2- 3 4/ by expanding it to correspond to the *buzurg* pentachord, in which the larger than whole interval was recognized.

[13] D'Erlanger 1939: p. 435.

[14] The definition, it may be recalled, is not wholly straightforward. It begins with a '*rast* above the *sākāh*', presumably a reference to the final *sākāh* of the preceding mode to be discussed, *māyāh-ḥusaynī*, followed by a *dūkāh*, from which one descends by making it a *banjkāh* of a *rast* minus its final note, so that one ends on the lower *dūkāh*. The outline proposed could have been expressed much more simply, so that there is a lurking suspicion that the circumlocution may imply something further.

[15] Wright 1978: p. 57.

[16] Ibid.: p. 226.

[17] And that this was likely to have been a standard feature is indicated by the analysis of this composition by Mubārakšāh, who gives the octave scale but then adds (D'Erlanger 1938: p. 559) that the characteristic notes are precisely the six notes it uses.

[18] Wright 1978: pp. 117–18.

[19] Wright 1978: pp 68 and 73.

[20] The passage is translated in Wright 1978: p. 172.

[21] They are qualified, respectively as *aṣl* and *zā'id*. See e.g. Marāġī, *jāmi' al-alḥān*, p. 140, and al-Lāḏiqī (D'Erlanger 1939: pp. 367 and 369).

[22] These four modes are then related to the four-fold humours and elements.

[23] The others being *ḥijāzī, 'ukbarī* and *sāzkarī*.

[24] For which al-Irbilī offers alternative derivations, either that given by Ibn Kurr for *kawašt* or that given for *zirkašī*.

[25] It cites the Persian claim that *'uššāq* and *zankulā* are derived from (*rāst* =) *ra's al-hank*, with the consequence that *salmak* cannot be derived from them because it occurs at the top of the range of *iṣbahān* and *ra's al-hank* at the lowest.

[26] For which al-Irbilī offers either *ḥusaynī* and *'uššāq* or *zīlakand* and *iṣbahān*.

[27] For which al-Irbilī offers *māyāh* and *zankulā*.

[28] For example, al-Irbilī offers both *ḥijāz* ← *būsalīk* + *nawā* and *ḥijāz* ← *'uššāq* + *zankulā*, where only in the second could one detect, in the presence of *zankulā*, some possible degree of similarity in scale structure.

[29] Also to be noted is that al-Irbilī applies the principle to yet more modes, offering derivations for three, classed as *šāz* (< *šāḏḏ*), from the six *āwāzāt*:

'uzzāl ← *šahnāz* + *nayrūz*
zawālī ← *salmak* + *zirkašī*
'ukbarī ← *ḥijāz* + *kawašt*

[30] With al-Lāḏiqī, who associates each of the 12 *šadd* modes with a zodiac sign and an element (British Library Or. 6629, fols 65v–68r, D'Erlanger 1939: pp. 429–37).

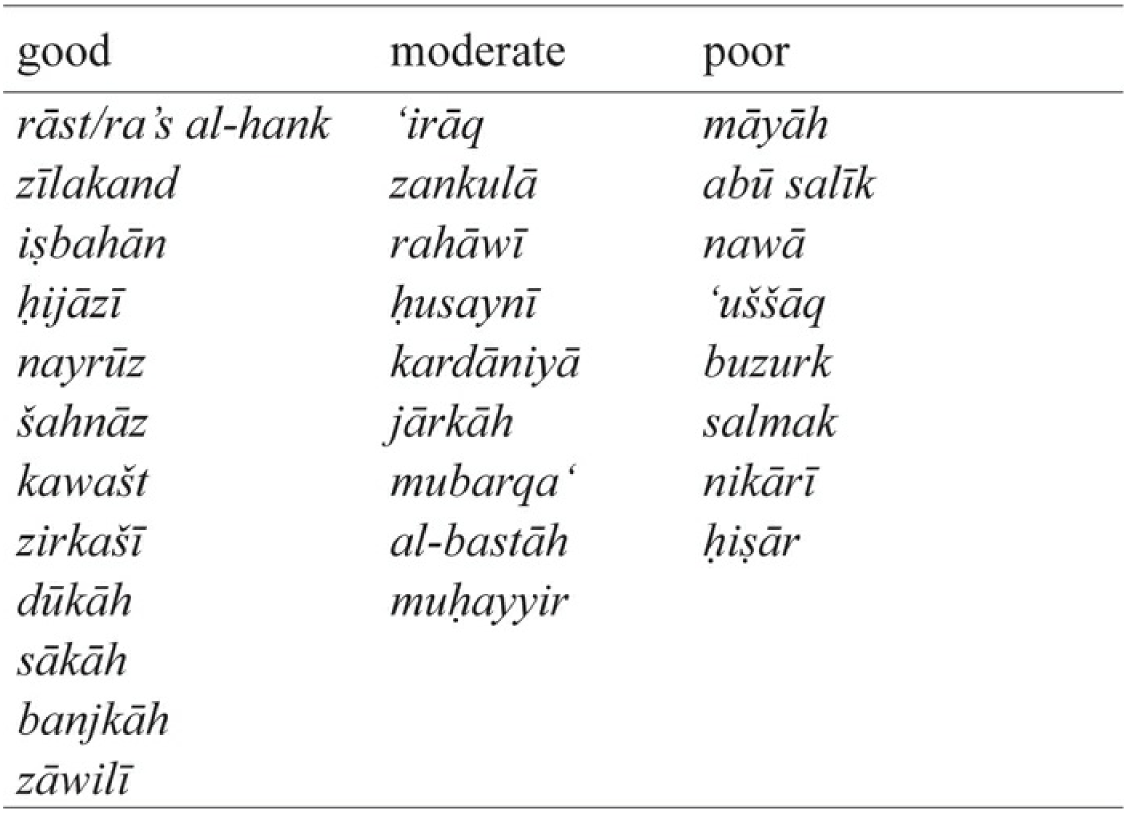
[31] *kitāb al-adwār*, p. 113.

[32] Again, one may note the eastern associations of *ḫwārazmī*, and possibly also of *nahrī*, if short for *māwarā' al-nahr*. But although this last name is attested in Turkish treatises, a connection can be excluded, as it does not surface in them before the end of the eighteenth century (Popescu-Judetz 2010).

[33] Although he notes *nahāwand* as just an alternative for *zangūla*, and likewise *muḫālifak* for *zīrafgand*. Further names appear in later Systematist treatises, but in the present context these may be disregarded.

Chapter 7
Postlude

Whatever their morphological properties, the presence in the *ġāyat al-maṭlūb* of modes unattested in Systematist texts such as *ʿukbarī, ramal, sāzkarī* and *ṣaʿīdī* is hardly unexpected, and by no means problematic. But insofar as the perception of certain modes as local and hence in the grander scheme of things somewhat marginal presumes a simplistic model of relationships akin to one of centre and periphery, it raises again the fundamental and still unresolved issue of the consistency of that centre or, better, elite stratum, and the extent of its trans-regional dominance, for once we move from acknowledging the international currency of names to examining the entities they denote matters become far less clear-cut. It is true that in spite of the radical divergence in the accounts given by Ibn Kurr and Systematist theorists of the general physiognomy of modal structure it has been possible to show that in several instances the differences they portray are apparent rather than real, yet in others they cannot readily be explained away and, as Figure 7.1 shows, a crude stratification of the levels of correspondence suggested by the previous case-by-case comparisons shows that the remaining level of divergence is disturbingly high, with the modes in which there is a high degree of unanimity outnumbered by those in which there is not. The latter contain, further, a stubborn minority where similarities are not just partial but difficult or impossible to establish, and among them only two are outside the *šadd* and *āwāz* groups, with the result that the forms in which Ibn Kurr describes fully a third of these core categories would hardly have been recognized by al-Urmawī.



good	moderate	poor
rāst/ra's al-hank	*ʿirāq*	*māyāh*
zīlakand	*zankulā*	*abū salīk*
iṣbahān	*rahāwī*	*nawā*
ḥijāzī	*ḥusaynī*	*ʿuššāq*
nayrūz	*kardāniyā*	*buzurk*
šahnāz	*jārkāh*	*salmak*
kawašt	*mubarqaʿ*	*nikārī*
zirkašī	*al-bastāh*	*ḥiṣār*
dūkāh	*muḥayyir*	
sākāh		
banjkāh		
zāwilī		

Figure 7.1 Levels of correspondence

Taken together with the strikingly independent account of the rhythmic cycles that it presents, the evidence of the *ġāyat al-maṭlūb* thus calls into question the homogeneity of idiom that is a precondition for the existence of a dominant great tradition which, as well as stretching eastwards through an archipelago of centres of princely power and patronage eventually to embrace, under the Timurids, the further reaches of the Persianate world, one would assume to have been intrinsic to art music practice in the major Mamluk cities.

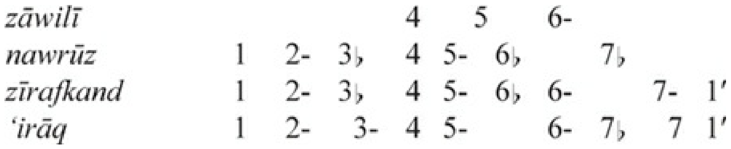
However, the presence of what appears to be an area of substantial difference does not necessarily mean that the concept should be summarily abandoned. The same data can be read in a rather more positive light by giving greater emphasis to the conclusions that it has been possible to draw about significant commonalities within the stock of individual items or elements, so that while in certain cases the evidence points to clearly contrasting identities masquerading under the same name, in the majority the inference, generally unquestioned because often not examinable, from identity of name to identity of what is named, or at least close similarity, turns out to be justified: it is clear that Ibn Kurr's account of several modes, however different the expression, tallies with that of Šīrāzī or, later, Marāġī. Thus although he presents, by comparison with the apparent cohesiveness of the dominant bloc that appears in the form of octave scales in Systematist definitions, a collection of smaller segments that give the immediate effect of a startlingly different and fragmented modal landscape, several can be equated straightforwardly with entities (whether tetrachords, pentachords or species of third) that Systematist theorists designate by the same names, identifications that bring these contrasting accounts significantly closer and confirm the evidence provided by Šīrāzī from within the Systematist citadel that points fairly clearly to the occasionally deceptive nature of the standard Systematist definitions, distorted by the demands of analytical uniformity.

We may also consider at this juncture the extent to which al-Urmawī's own treatises reveal inconsistencies indicative of a degree of flexibility in the use of terminology or, to reverse the perspective, in the range of phenomena to which a particular term might be applied. Such flexibility or variation has been noted in particular in the domain of rhythm, where both within each of the *kitāb al-adwār* and the *risāla al-šarafiyya* as well as between them, differing internal patterns are recorded for a number of rhythmic cycles. [1] To a certain degree they spell out as distinct forms variations that for earlier theorists might have been regarded as subsumable under one archetype and hence not to require specification as separate entities; and they accordingly reinforce the notion of a cycle as a permissive zone within which musicians could display a degree of personal inventiveness, their ability to manipulate a recognized set of basic cells within a stable overall framework enabling them to produce new combinations. Inconsistences in the modal domain are, however, much harder to trace in al-Urmawī's own texts: from them we can deduce little beyond the fact that a degree of autonomy may be credited to the constituent elements, although in the particular case of *rahāwī* we have a surely indicative disjunction between the basic element and the octave scale of the same name where the argument for its presence is quite unconvincing. [2] For further independent entities that do not fit into the octave mould we need to turn to Šīrāzī, who also provides evidence of the important role played by the concatenation of basic elements; at the same time, however, he reinforces the validity of the octave structure by adding to the examples listed by al-Urmawī and even, indeed, including extended structures that span an octave and a fourth.

There remain, then, the notations, to which reference has already been made when comparing versions, that in *kawašt* (6.4) being revelatory of a structure not best described in terms of the octave model. Included by both al-Urmawī and Šīrāzī, they encompass brief instrumental and vocal examples as well as a single more extended vocal composition. The former begin with a brief untexted example spanning just a single tetrachord that is surely meant to serve as a sample of how to notate rather than as a representation of a composition proper, but the simple melodic outline is identified with a given mode, [3] and the fact that it is then repeated as a text setting lends it a more substantial air: the tetrachord in question clearly has independent weight. [4] Similarly with Šīrāzī's much more detailed notation of a composition by al-Urmawī, which shows how pieces could incorporate multiple modulations, some of them quite brief: in one case, indeed, a mere four notes serve to define a mode that, if one considers just its pitch organization, differs in only its final note from the mode within which it is embedded. It is true that Šīrāzī had defined it in terms of precisely, and only, these four notes, but the fact that in the composition it is not melodically prolonged by any form of internal repetition or range extension confirms the recognition in practice of quite small-scale elements as autonomous (and identifiable) modal entities, evidence that serves to corroborate the viability of the nuclear forms characteristic of Ibn Kurr's presentation. Yet a distinction still remains, for whereas Šīrāzī sometimes gnaws away at the decorous façade of the octave scale model in the process of defining and discussing modal structures, Ibn Kurr completely ignores it: it has, quite simply, no place in his perception of modal identity, which brings us back one again to the fundamental question of the degrees of refraction caused by these varied angles of vision and how they should be interpreted. Thus despite the fact that Ibn Kurr goes much further than Šīrāzī in this respect, it could been argued, setting aside certain evident disparities, that little is radically other in his account when compared with what we can glean, through the glimpses afforded by the notations, of the practice that lies behind Systematist formulations. Accordingly, the disjunctions between their versions would have more to do with the nature of the theoretical superstructure itself than with the phenomena it attempts to articulate, so that whatever differences there may have been between practice in Cairo and, say, Shiraz, are thereby made to appear deceptively larger. In certain cases, indeed, it has been possible to demonstrate that one or other of the versions offered gives a partial or skewed account of what is substantially the same entity, while others have been reconciled by compensating for differing emphases, the selection of particular features from a common stock and the consequent suppression of others. To take a fairly straightforward example, from Šīrāzī's description one would take *jārkāh* to be based primarily on /1 2 3- 4/, extending at least to 7 - below and 5 above, with 4 prominent; there is no mention of 5=, although its at least occasional presence might be inferred from his mention of it in relation to *sākāh*. [5] Ibn Kurr agrees that 4 is important, calling it the 'house (*bayt*) of *jārkāh*', but his description explicitly includes 5=, and one can see here readily enough that his formulation, by attaching importance to a note not directly mentioned by Šīrāzī, might suggest that there were two significantly different versions when in all probability they were closely related, if not, indeed, virtually identical. Elsewhere we may find, within what could be analysed as a possibly fluid compound structure, the selection of different segments as characteristic, a case in point being *zankulā*, for which, collating Šīrāzī's description with the evidence of his notation, we may arrive at a melodic structure oscillating around 4, calling upon /1 2 3- 4/ below and *ḥijāzī* /4 5- 6 7♭ / above. In Ibn Kurr's account it consists essentially of an ascent through /1 2 3- 4/, but while the section devoted to *zankulā* (5.9.1) makes no mention of *ḥijāzī*, he does comment elsewhere that it may be used above: [6] in other words, the same combinatorial elements are in place, but less firmly welded together.

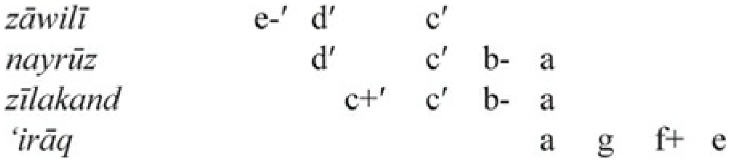
However, in pursuing the above line of argument, explicitly biased in favour of equivalence and reconciliation as a counterbalance to the previously expressed scepticism, the importance of such divergences between looser and tighter arrangements should not be underestimated. Central to them is the distinction between an analytical apprehension of cohesiveness on the part of Systematist theorists, al-Urmawī in particular, of a foregrounding of larger structures the constituent parts of which are predetermined, in opposition to the smaller-scale perceptions of Cairo musicians as articulated by Ibn Kurr, with the consequent implication of freer forms of association. These perceptions are apparent not only across what might be termed the common stock but also in his accounts of the modes apparently unknown to the Systematists, a general characteristic of which is again a comparatively narrow ambitus: even though the majority of the additional modes listed later by Marāġī also have a compass of less than an octave it is rarely less than a fifth, whereas here, in the three cases the interpretation of which is straightforward, it is less than a fourth. What still remain unclear from Ibn Kurr's accounts, however, are perceptions of identity in relation both to sequencing, the ways in which these nuclear entities might be combined (and not only in the conventional pairings listed), and to expansion, especially on the potentially wider canvas of an actual composition.

Here there are one or two hints to be drawn from al-'Umarī's notice of Yaḥyā al-Ġarīb al-Wāsiṭī, who formed part of a musical circle that included, amongst other prominent figures, al-Urmawī, some of whose compositions he transmitted when he came to Cairo. Among his own compositions mention is made of a three-line setting, [7] the first in *zāwilī* descending (*habaṭ*) upon *nayrūz*; the second in *zīlakand*; [8] and the third in *'irāq*, and when considered in relation to the initial definitions offered by Šīrāzī and al-Urmawī, who represent most of the members of this modal sequence from the same initial pitch, they would yield the following progression:



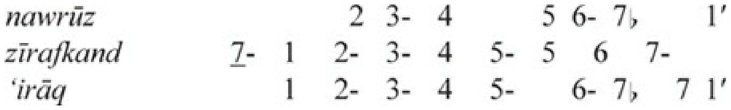
zāwilī					4		5		6-				
nawrūz	1	2-	3♭		4	5-		6♭		7♭			
zīrafkand	1	2-	3♭		4	5-		6♭	6-		7-		1′
ʿirāq	1	2-		3-	4	5-			6-	7♭		7	1′

Some of the transitions here, the first especially, seem rather abrupt, and on the assumption of an aesthetic that preferred to maximize consonant relationships and, consequently, smooth transitions, it will be seen that a rather more persuasive progression emerges if we adopt Ibn Kurr's definitions which, with a high register position for *zāwilī*, use the following pitches:



zāwilī	e-′	d′		c′					
nayrūz		d′		c′	b-	a			
zīlakand			c+′	c′	b-	a			
ʿirāq						a	g	f+	e

This suggests, indeed, that greater attention should be paid to the overlapping positions of the *šadd* modes when aligned by al-Urmawī in the format of concentric circles.[9] These, taken together with his fret definition for *nawrūz*,[10] would yield:



nawrūz				2	3-	4		5	6-		7♭			1′
zīrafkand	7̲-	1	2-		3-	4	5-	5		6		7-		
ʿirāq		1	2-		3-	4	5-		6-		7♭		7	1′

which at least suggests a modulatory logic determined by partial return, even though the result is hardly as convincing as that derived from Ibn Kurr's account.

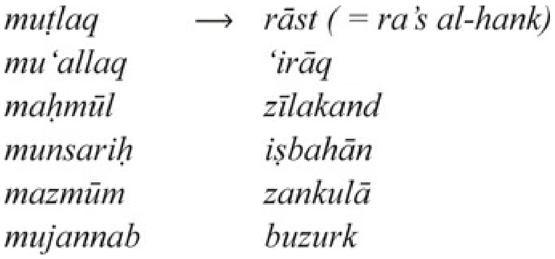
Also mentioned is a *qawl* by the same Yaḥyā al-Ġarīb al-Wāsiṭī including all 12 *šadd*[11] and six *āwāz* modes – incidentally an interesting precursor of the Ottoman *kâr-i natık* form – and another traversing the 12 *šadd*.[12] These initially suggest swift transitions and thus extreme compression, but as the former was set, we are told, over 42 and the latter over 36 cycles of *ṯaqīl ḫurāsānī* (of 24 time units, assuming identity with Ibn Kurr's *ḫurāsānī*), thus yielding an average span of some 50–70 time units for each mode, the question that arises is rather the opposite one of the extent to which the melody might have remained within the sometimes extremely narrow confines of the definitions given by Ibn Kurr, and if not how it might have spilled over. The point is emphasized by the inclusion of two compositions in *māyāh*,[13] one of which is even qualified as *muḫliṣ* ('pure'). Although this piece is relatively short, consisting of nine cycles of *turkī*, it is clear that the two notes of *māyāh* as defined by Ibn Kurr must have been unequal to the task of providing adequate melodic substance, thus suggesting that it might, rather, have been based upon the version that Šīrāzī described.

Yet another *qawl* by the same composer is remarkable for the arbitrary nature of its modulatory structure. Retaining the traditional order in which the first *šadd* is *rāst* and the last *ʿuššāq*, it has as frame an incipient inward spiral proceeding from 1 to 12 to 2 to 11, and within this inserts two *āwāz* modes, *nayrūz* between *rāst* and *ʿirāq* (but whether before or after *ʿuššāq* is not said), and *kawāšt* between *nawā* and *ʿuššāq* (but whether before or after *ʿirāq* is not said).[14] Here, presumably, we should abandon the primacy of consonance as a likely determinant of sequence and note, rather, the intellectual appeal of abstract pattern making in the complex reordering and interweaving of modes from different categories. Such insights into compositional procedures are of evident value, but of themselves fail to shed light on the existence or otherwise of regional differences, and in the absence of additional evidence from elsewhere continued discussion of this topic appears doomed to remain at best marginal, and fundamentally unable to resolve the crux of the degree of propinquity between modal practice in Cairo and that revealed by Arabic and Persian texts from major cultural centres to the east. Yet setting aside the legitimate but more general concerns that may be raised about how, whatever the mobility of musicians, a great tradition primarily dependent upon oral rather than written transmission could be sustained and propagated over such vast distances, whether at the level of canonic structures or that of repertoire,[15] there is still something quite specific that demands explanation: the curious discrepancy between the use of a common nomenclature in different places and, in a significant minority of cases, its apparent failure to designate the same entity.

Here, rather than continue to drift rudderless between contrary and equally tentative conclusions, it might be possible to take the argument further by recalling certain pointers to receptivity, to a seemingly one-sided willingness on the part of Cairo musicians to absorb elements from outside. There appears, indeed, to be no trace of musicians from Egypt being lauded in Baghdad or centres further to the east: however incomplete the record, whatever reports we have point to the transfer of the idiom reflected in Systematist texts into Syria and Egypt.[16] In his account of recent composers (from the second half of the thirteenth century on), al-ʿUmarī begins with al-Urmawī, and includes three musicians who had been in contact with him or with one of his pupils and then travelled west: Niẓām al-Dīn Yaḥyā b. al-Ḥakīm, a pupil of Suhrawardī who went from Baghdad to Damascus;[17] Yaḥyā al-Ġarīb al-Wāsiṭī, who learned from al-Urmawī and other members of the circle around Juwaynī and went to Egypt;[18] and Kutayla, who memorized many of al-Urmawī's *nawba*s and came to Cairo, where he trained the *jawārī* of al-Nāṣir.[19] Mention is also made of musicians who move within Syria, from Ḥamāh to Damascus, but of none who travelled from Egypt or Syria to points east. Indeed, striking about al-ʿUmarī's material is how little of it refers to Cairo:[20] apart from the very last entry on Ibn Kurr Cairene composers, as distinct from those who came to Cairo, fail to be mentioned, and one might almost be tempted to suspect that, their personal friendship apart, Ibn Kurr was included as much for his having set verse by al-ʿUmarī himself as for his acknowledged musical prowess.

Within Ibn Kurr's own text, the appearance of *šaškāh* and *haftkāh* may be seen as indicative of the east to west drift. They demonstrate that the 'number' modes had been sufficiently well naturalized for two further members of the series to be generated, an expansion which also suggests that despite the others having first been attested in the *durrat al-tāj* just a few decades before, they could hardly have been recent Persian imports to Egypt. One may note, in parallel, the evidently well-established use of *rast, dūkāh* and *sākāh* to specify pitches/frets, supplanting whatever Arabic terminology had been in vogue before;[21] and this quite fundamental substitution is all the more striking when we consider the relative conservatism of the *nafā'is al-funūn* and the *kanz al-tuḥaf*, contemporary Persian texts that still retain the Arabic fret vocabulary used by al-Urmawī. Such developments point to receptivity and integration, to an openness and capacity to adopt and adapt among Cairene musicians, possibly even extending to an eagerness to ape fashionable Persian ways and elaborate an imported vocabulary by analogy beyond the point reached in Persia itself.[22]

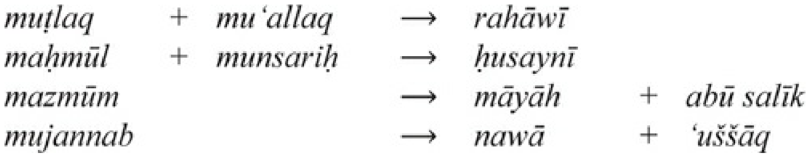
It is difficult, nevertheless, to comprehend the diffusion of names as a simple rebranding exercise in the course of which some end up being applied rather cavalierly to modes markedly different from those they originally denoted. Yet the account offered by al-ʻUmarī at the very beginning of his volume on musicians discloses or rationalizes a process that is far from a straightforward juxtaposition of identical or similar structures and a consequent erasure of one name in favour of another. The earlier indigenous corpus, we are told, consisted of 18 entities, a potentially perfect match, it would seem, for the 18 *šadd* and *āwāz* modes, but it was one of an essentially different order, as it resulted from the multiplication of six modes by three rhythmic types,[23] which meant that the greater diversity of melodic labelling that was being introduced could not easily be mapped onto it, and had to be accommodated in a rather artificial manner. The first step was to make the substitutions shown in Figure 7.2, concerning which it may be observed that primacy is given, as expected, to the four modes at the head of the *šadd* group, and that save for the slightly unclear case of *ʻirāq* they are modes in which there is an evident similarity between Ibn Kurr's account and that of al-Urmawī, so that there is a strong likelihood here of a substitution of names on a like-for-like basis.



muṭlaq	⟶	*rāst* (= *ra's al-hank*)
mu'allaq		*ʻirāq*
maḥmūl		*zīlakand*
munsariḥ		*iṣbahān*
mazmūm		*zankulā*
mujannab		*buzurk*

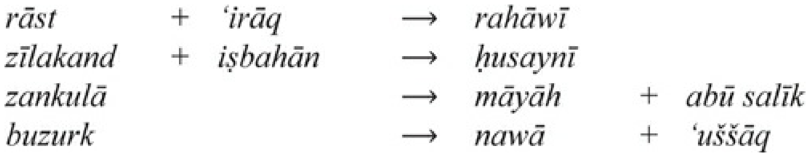
Figure 7.2 Name substitutions

But the similarity diminishes with *zankulā* and all but disappears with *buzurk*, so that the principles underlying the process become uncertain, and beyond that we are faced with hypothetical modal derivations of the kind familiar to al-Irbilī whereby the remainder of the *šadd* modes are derived either individually from pairs drawn from the earlier nomenclature or in pairs from single ones:



muṭlaq	+	*mu'allaq*	⟶	*rahāwī*		
maḥmūl	+	*munsariḥ*	⟶	*ḥusaynī*		
mazmūm			⟶	*māyāh*	+	*abū salīk*
mujannab			⟶	*nawā*	+	*ʻuššāq*

Substituting the equivalences previously given we would arrive at:

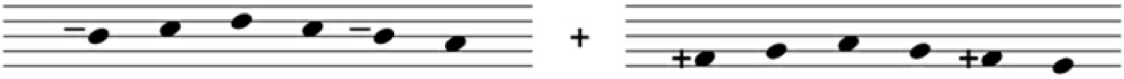


rāst	+	*ʻirāq*	⟶	*rahāwī*		
zīlakand	+	*iṣbahān*	⟶	*ḥusaynī*		
zankulā			⟶	*māyāh*	+	*abū salīk*
buzurk			⟶	*nawā*	+	*ʻuššāq*

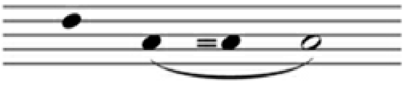
and these, whether considered in relation to the definitions given by Ibn Kurr or to those given by the Systematists, are just as eccentric, if not more so, as those proposed by al-Irbilī, and cast serious doubt upon al-ʻUmarī's assertion of changes of name but not of substance. Thus despite the evidence for diffusion and transfer, the conclusion has to be one contrary to the seemingly common sense argument put forward in the Prelude, that a name imported into Cairo would not be arbitrarily attached to a mode quite different from the one it designated in Baghdad. Even if only in a minority of cases this does, indeed, appear to have happened, so that the presumption of a straightforward overlay whereby one set of terms simply replaced another designating the same entities cannot be sustained.

A further and surprising aspect of modal nomenclature is that, despite forming no part of either al-Urmawī's or Šīrāzī's modal catalogues, we find among the former's notations mention of *mujannab al-ramal* and *muṭlaq*,[24] evidently remnants of an older set of mode names. Although, to judge by the notations, they are perhaps to be associated with elementary didactic materials no longer typical of current modal practice in Baghdad, they offer intriguing glimpses into the set of names that had previously been current in Cairo too. However, the possibility that they might point to an earlier stage of greater uniformity is not borne out by the notations, for the example in *muṭlaq* cannot be equated with *rāst*,[25] as would be required by al-ʻUmarī's set of correspondences, and likewise that in *mujannab al-ramal* (assuming it to be related to al-ʻUmarī's *mujannab*) bears not the slightest resemblance to Ibn Kurr's *buzurk*.[26] Such evidence thus provides no grounds for hypothesizing that the discrepancies between some of Ibn Kurr's versions and those of the Systematists could be accounted for by an earlier unitary system having gradually evolved in different ways in different places.

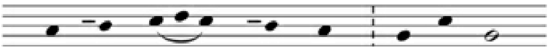
Rather more instructive, perhaps, are accounts of the transmission of al-Urmawī's own compositions from Baghdad to Egypt, for even if questions of interpretation remain, they constitute a particularly obvious instance of a musical traffic involving modal labelling, and hence notions of modal identity, as a standard feature. Indeed, it might be possible to go beyond vague and rather unhelpful presumptions of compatibility of idiom by speculating how the one al-Urmawī composition notated in detail by Šīrāzī might have been received by a sophisticated Cairo audience and perceived analytically in accordance with Ibn Kurr's descriptions. If we begin with the obvious correspondence of the name of the mode of the piece, *muḥayyir al-ḥusaynī*, to Ibn Kurr's *muḥayyir* , defined as:



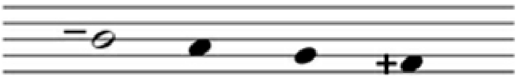
we may be tempted to identify the finalis of the composition as e. However, its initial ascent would then be from d′ to e′ and then f+′, both of which lie beyond its range and, more importantly, involve a rare half note and, worse, one that is not even part of the pitch system Ibn Kurr recognizes. Transposing down a whole tone or, more accurately, perceiving the first three notes in relation to the above as c′, d′ and e-′ resolves this problem, although without aligning them within the range of *muḥayyir* as presented here. However, if it is assumed that a high-register rendition of *sākāh* would not have a prominent d′ and a weak e-′, as at the beginning of this composition, they are not readily to be identified with any other mode, and can certainly be understood as emphasizing the top note of *muḥayyir* , adding to it a flanking upper note not part of the definition, just as Šīrāzī adds ancillary pitches beyond those provided in his own definition. They include the a= associated with the following a, which Ibn Kurr would presumably have understood as marking out the lower limit of the first segment:



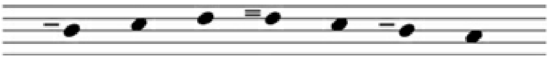
after which the whole a – d′ tetrachord is developed. This is followed by an open fourth, g c′ g, suggestive of a modal shift, but not yet taking the first step outside the territory of *muḥayyir* :



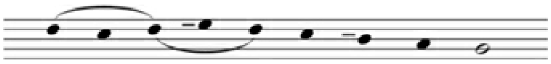
This first step, though, follows immediately, for the next phrase segment, as with others later in the piece, is identified by Šīrāzī as a modulation. As it begins with b-, it is only the prominence of this note (as manifested by both duration and position in the cycle) that could mark it as introducing a modal shift, and we have no way of knowing whether Ibn Kurr would have interpreted it in the same way: for him it might have simply straddled the divide between the two constituent parts of *muḥayyir* . What is, however, clear is that he could have identified as a specific modal entity (in his case *ḥijāzī*) the descending b- a g f+ phrase that Šīrāzī identifies as *rū-yi ‘irāq* (a mode not mentioned by Ibn Kurr):



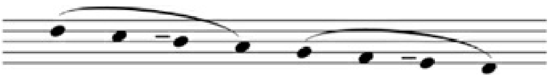
We then have a return to the original mode followed by what may reasonably be analysed as a further modulation (albeit not one signalled by Šīrāzī) that Ibn Kurr would surely have recognized as a form of *iṣbahān* , that with a as finalis rather than g:



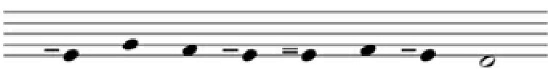
As with the earlier g c′ g open fourth, the next phrase descends to g but now establishes it as prominent, ushering in the exploration of the lower register:



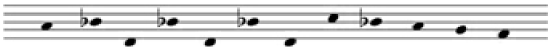
It would be possible to start by mapping this onto the lower member of Ibn Kurr's segmentation of *muḥayyir* in terms of conjunct tetrachords, but as the finalis is not e but an emphatic d it is much more convincingly related to a disjunct disposition:



For Ibn Kurr, therefore, this may have been an initially puzzling reconfiguration, although the material itself can hardly have occasioned surprise, despite the presence of an unfamiliar ancillary note in the cadential phrase that completes the setting of the first line of verse:

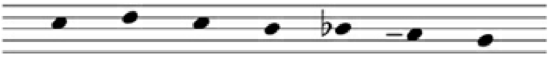


Before this is reached, however, there is another brief passage, not marked as a modulation by Šīrāzī , that departs from the original pitch set by introducing b♭ :

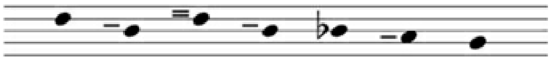


and for Ibn Kurr this would be harder to account for, although possibly to be understood in terms of *ṣaʿīdī*.

Similar difficulties would have been encountered in the three modulations that follow the repeat of the setting for the second verse. The third has already been discussed in relation to reconciling the two versions of *zankulā*, and it is not clear how familiar Ibn Kurr would have been with its upward extension here; the second corresponds partially with a transposition of *iṣbahān*:



and the first could perhaps have been understood by him as *šahnāz* with c′ omitted:



All in all, then, a reading in terms of the modal repertoire as described by Ibn Kurr gives the impression of a string of familiar elements assembled in a slightly unexpected way, interspersed with episodes where the focus becomes blurred and modal identity more difficult to establish, enough, perhaps, to make the piece novel and rather unusual, even unsettling, but not enough to seriously inhibit comprehension and appreciation of the compositional craft its modal progressions exhibit.

More elusive, for purposes of comparison, are its formal and rhythmic aspects. The formal label used by Šīrāzī, *qawl*, is not one that Ibn Kurr mentions, but there is no reason to think that he was exploring the repertoire of forms (as distinct from enumerating certain formal features) at all exhaustively, and in all probability the *qawl* was familiar to him, as it is mentioned several times by al-ʿUmarī. There is, in any case, quite apart from the trivial point that he would have recognized this composition as belonging to the *baʿd* category (that is, not beginning on the first time unit of the cycle), some analogy between its A A B A structure and that implied by his account of *ḫafīf*, although there the unit is the hemistich, not the whole line, the B section being the setting of the third hemistich rather than of a string of nonsense syllable, as in the *qawl*. The formal structure of this song, in short, is unlikely to have been perceived as in any way strange. Sections covering a whole line might have been unusually long by comparison with those in *ḫafīf* songs, but the overall proportions of this *qawl*, which contains 31 cycles in all, are certainly not excessive when set against those cited by al-ʿUmarī, some of which have an even greater number of cycles.

The rhythmic domain is better documented, but somewhat more elusive and difficult to assess, particularly given the lack of fit between the definitions of the rhythmic cycles provided by al-Urmawī and Ibn Kurr. There is, however, one obvious point of resemblance: the cycle of the *qawl* is *ḫafīf (al-ṯaqīl)*, of 16 time units, to which correspond the 16 time units of Ibn Kurr's *muḫammas qaṣīr*, and in both cases the pattern of percussions fits within a 4 + 4 + 4 + 4 subdivision of the whole, thus facilitating recognition of the overall rhythmic articulation. According to the theoretical definitions offered for these two cycles, the inner articulations of the subdivisions, which remain the same throughout in both accounts, do not tally, al-Urmawī giving /x . x x/ for *ḫafīf (al-ṯaqīl)*,[27] Ibn Kurr /x . x . / for the basic form of *muḫammas qaṣīr*, but the differently placed extra attack in the *māšī* variant, /x x x . /, produces a pattern that coincides with the different pattern specified by Šīrāzī for this composition. It has been suggested that the *māšī* variant, not being the standard pattern, would only have appeared intermittently, but this could not have constituted a serious impediment to acceptability or, indeed, any kind of impediment at all. In any case, for all the amount of detail and the multiple variants set forth by Ibn Kurr, we have no means of knowing how free performers could be, although his recognition of the possibility of severing parts of cycles and soldering them to others certainly suggests a degree of creativity that was likely to encompass at least occasional variations in the internal patterning of attacks even beyond those he codifies. Equally, we have no means of knowing how or, indeed, whether performers realized the theoretical disposition of the cycle marked at the head of Šīrāzī's notation,[28] as against the separate set of indications for attacks that, instead, shadow and subdivide the melodic line. It is also, unfortunately, impossible to comment on this aspect in relation to another important variable, the distribution of syllables in the text-setting, whether in the lines of verse or the strings of nonsense syllables: neither Ibn Kurr nor al-ʿUmarī supplies us with a term of comparison. It would be reasonable to suppose that the basic principle followed in the *qawl* of having a high ratio of syllables to pitches at the beginning, guaranteeing ready comprehension, contrasted with extensive melismatic passages at the by now more predictable end of the hemistich, was one that Egyptian composers would also follow, but we have no means of knowing whether the particular balance between the two parts in this song, where the melismatic passages cover some 20 of the total of 31 cycles, would have been felt normal or excessive by Egyptian listeners.

As a general conclusion, then, on the limited information available it may be said that this composition contains, alongside much that we may presume to have been familiar to a sophisticated Cairo audience, a sufficient number of features not accounted for by Ibn Kurr to distinguish it from the output of local musicians, but not enough for it to be rejected as alien. It thus leaves us poised uneasily, as before, between different interpretations of what the contrasting theoretical accounts reviewed above might imply for regional variation, while at the same time suggesting that whatever discrepancies of idiom it reveals would hardly have constituted a serious impediment to the mimetic adaptation implied by reports of the diffusion of al-Urmawī's compositions.

For the *ġāyat al-maṭlūb* as a whole there is a further aspect to be considered, that of its wider social, cultural and intellectual background. Quite apart from the absence of the kind of detailed codification of interval ratios and string lengths that characterizes the major Systematist treatises and links them to the intellectual tradition of scientific enquiry that had been developed, especially, by al-Fārābī and Ibn Sīnā, what is immediately striking about Ibn Kurr's work is the level of discourse that it adopts in the main body of the text. A switch from the *sajʿ*-decorated rhetorical flourishes of the introduction to a much less elevated style in what follows was only to be expected, but rather than one reflecting the sober punctiliousness of a scholarly treatise that adheres to the norms of classical morphology and syntax it is suggestive in part of direct communication between musicians who may well have had at their fingertips a vast stock of classical poetry for performance purposes but who conversed in a much more informal register that was in some respects linguistically distinct. As far as content is concerned, it is also noteworthy that it eschews the speculative: for all that it repeats the assertion of the superiority of theory (*ʿilm*) over practice (*ʿamal*), its matter is largely descriptive, and although it takes a basic level of knowledge for granted it reads in places like an elementary instruction manual (with frequent sentences of the type ‘if you wish to … then you should …’). This is not to suggest that its claims to comprehensiveness and sufficiency should be brushed aside: the *ġāyat al-maṭlūb* does in fact cover a great deal of ground; it is, rather, to note that it reflects a type of thinking about or, rather, engagement with music that is essentially pragmatic and largely divorced from the theoretical concerns of Ibn Kurr’s Abbasid predecessors and Systematist contemporaries.

From this, however, it cannot be concluded that the texture of patronage and practice, of how music fitted into the matrix of the culture of the court and its surrounds in the major Mamluk cities, was in any significant way different from what had gone before, or what might be encountered elsewhere. Contemporary comparisons, unfortunately, cannot effectively be made, given the paucity of documentation for other regions. That for Egypt and Syria is rather better: singers and performance events are certainly mentioned by Mamluk historians, if more in relation to the fifteenth than the fourteenth century, but given their natural preference for the recording of public events of pomp and circumstance the information they provide is often incidental and fragmentary, and they certainly do not supply sufficient detail for it to be possible to draw a map of music as a court practice, with its attendant social, economic and ideological implications. [29] Nor should hasty conclusions be drawn from the peculiar power structure of the Mamluk state, one characterized by the persistence of a non-hereditary ruling military caste drawn from a continuing supply of non-Arab slave recruits. An early Mamluk ruler such as al-Ẓāhir Baybars (1260–77), for example, a Kipchak Turk who spent his childhood in the Crimea and was perpetually on campaign, can hardly have had the same taste in music or have cultivated it in the same way as his near contemporary, the last Abbasid caliph, al-Musta‘ṣim (1242–58), al-Urmawī’s patron in Baghdad. Yet assimilation to Arab cultural norms was to prevail, and many later Mamluk rulers, and their descendants, were educated men thoroughly versed in Islamic scholarship and Arabic letters. As far as Ibn Kurr is concerned, his mature career coincided with the latter part of the lengthy reign of al-Malik al-Nāṣir, a period of relative stability and prosperity that lasted for most of the first half of the fourteenth century, until Egypt was devastated by a major outbreak of plague in 1347–8. As the largest city of the Near East, the capital of the dominant political power in the region, and its greatest centre of scholarly as well as mercantile activity, Cairo would have had many knowledgeable patrons providing an environment conducive to the maintenance and further development of a sophisticated art-music practice, as well as less knowledgeable parvenus with cultural aspirations and deep pockets willing to support it. Lacking, however, are clear pointers to the character of such patronage, and in particular to whether the predominant taste was for fashionable Iraqi and Persian styles imported by musicians from the East, or whether it would have allowed, even promoted, local particularism. There are suggestions of a wider variety of accompanying instruments than hitherto, but it is difficult to detect more than faint hints of regional differences in their distribution: alongside the *‘ūd*, references occur to the *jank* and *kamanja* as an accompanying instrument; [30] both *qānūn* and *rabāb* are described in the *kašf al-humūm*, presumed to be a Mamluk text, [31] with the latter being depicted in one manuscript in a form reminiscent of the North African *rabāb*; [32] in addition, a distinction is drawn in the same text between two harp types, the *jank ‘ajamī* and the *jank miṣrī*[33] (the former, however, being stated to be the more common); and elsewhere in the iconographical record it is possible to see differences in the depiction of long-necked lutes. [34] However, indisputably fourteenth-century representations of musicians and instruments are otherwise too few for clear conclusions to be drawn, and there appear to be no significant variations between Mamluk and non-Mamluk court-music instrumental ensembles, in both of which the harp appears alongside wind instruments and various lute types. [35]

Looking beyond the musical sphere, it is certainly possible to point to the existence of distinctive features marking out Mamluk artistic production; the difficulty lies in interpreting them. [36] There is, for example, clearly something particular about Mamluk architecture, not least its sheer quantity, but although this is readily explained by the need felt by successive Mamluk rulers to create enduring manifestations of legitimacy and religious orthodoxy, such motivations were by no means peculiar to them, and reasons for the contrasts between its characteristic design features and those, say, of Ilkhanid architecture are not readily apparent – indeed, it may be misguided to suppose that there should be any, and more sensible to expect the regional differences they exhibit to be the norm. When we turn to, say, miniature painting or metalwork, identifying something as Mamluk is normally the outcome of comparative study of stylistic and iconographic features that allow it to be assigned to a particular constellation of items for at least one of which there is reliable documentary evidence tying it to Egypt or Syria, and beyond their purely taxonomic function the resulting findings are of value in that they serve the art historian’s quest to account for stylistic dynamics beyond those determined by external factors such as the availability of specific raw materials for ceramics: they provide evidence, variously, of the durability, evolution, diffusion and adaptation of particular motifs and design elements. The complexity of the picture that emerges, marked by transferability but at the same time by the retention or emergence of defining characteristics at different centres of production, should again suggest, although the analogy can only be indicative, the existence of a patchwork map of musical practices in which any internationally recognized norms were counterbalanced by local elements, each subject to change and permeable, and thus sometimes influenced by the other. However, given the absence of musical parallels to the physical survival of buildings, manuscripts, paintings and artefacts, it is primarily to the written word that we must turn for corroboration, and to a resigned acceptance of the sketchy nature of the evidence it supplies. For all the wealth of historiographical material, nothing written during the Mamluk period comes close to matching the rich documentation of musical life at and around the early Abbasid court preserved in the *kitāb al-aġānī*, [37] a work to which homage is paid, sadly, not by emulation but by reproduction. A particularly striking example is provided by the accumulated biographical and other material in the celebrated literary compendium *nihāyat al-arab fī funūn al-adab* by Aḥmad b. ‘Abd al-Wahhāb al-Nuwayrī (d. 1332), which contains a lengthy section on musicians. [38] One might have hoped that this would give some much needed insight not just into the attitudes of musicians and patrons but also into the status of musicians and the economics of music making among the upper echelons of Mamluk society, yet in the event it contains only a rehash of excerpts from the *kitāb al-aġānī* and from other early sources that deal with the permissibility of music: it is wholly devoid of contemporary material, a fact which in itself might deserve further discussion, but in the present context is merely to be recorded as a disappointing lack. The one significant exception is, precisely, the much-cited tenth volume of the *masālik al-abṣār* by al-‘Umarī. Here, indebtedness to the *kitāb al-aġānī* is just as patent and just as extensive, but is partially counterbalanced by a following section in which material from a slightly later authority is added and, rather more importantly, by a briefer personal contribution, an account of several contemporary musicians. This is certainly informative, and has been called on repeatedly above, yet the insights it affords are limited, and not just by stylistic constraints. It conveys something of the mobility of musicians as they seek, or are courted by, new patrons, but gives no hint, say, of the extent to which the idiom of the art-music tradition was familiar to the wider populace, or itself drew upon more popular styles. It is quite reasonable to suppose that, as more recently, its modal structures were propagated through the vocal style of the more sophisticated Qur'ān reciters and the muezzins of the major city mosques, but evidence is not forthcoming and, unlike more recently, there are no clear pointers to court singers having graduated from an apprenticeship as performance of religious repertoires, whether Qur'ānic recitation, *inšād* or Sufi hymns.[39] In short, there is no way of determining whether the art-music idiom was or was not a quite familiar ingredient within the complex city soundscape, rather than being normally reserved to the élite, its exponents only being audible to the masses on special public occasions. Similarly, although change appears as a prominent theme at the beginning of the volume, al-'Umarī does not allow us to track it in any detail, or to evaluate the long-term effects of al-Urmawī's compositions as propagated in the major cities of Syria and Egypt.

For the texture of the normal idiom of fourteenth-century Cairo court musicians, and the extent to which it coincided with, was affected by, or remained independent of, that of their eastern contemporaries, it is thus to the crucial testimony of the *ġāyat al-maṭlūb* that we must return. To the extent that they have addressed this question, the preceding chapters have inevitably concentrated on comparisons with what the Systematist lens allows us to perceive, and while in certain respects tentative, the conclusions do point towards overlap being at best only partial. In the domain of rhythm, especially, we encounter an individual approach to the perception and codification both of basic structures and of the transformational processes to which they could be subjected, and above all an independent catalogue of cycles that has, on the surface, hardly anything in common with its Systematist counterparts. This points to a quite considerable degree of regional variation, for to the contrast already mentioned by al-Urmawī between Persian and Arab preferences we now need to add a distinction between Egyptian and Syrian norms on the one hand and those, presumably, of Iraq on the other, a distinction, moreover, that appears not to concern itemizing local additions to a common core but to operate at a much more fundamental level affecting the whole repertoire. Paradoxically, however, it may be suggested that such indubitably radical differences are at the same time only minor impediments to transferability, since the rhythmic cycles are the products of different ways of combining the same basic duple and triple building blocks, with the results in any case being less monolithic, unvarying structures than frameworks allowing a considerable degree of internal play. Indeed, what insights the literature affords into the historical development of rhythmic cycles, including the invention of new ones, point at times to a marked volatility, as structures are altered or superseded.[40] Mastery of one set of rhythmic cycles and the variations to which they could be subjected should thus enable swift comprehension of another and encourage receptivity, so that there is nothing surprising about the ready acceptance given to al-Urmawī's songs, even if their compositional style was underpinned by rhythmic structures the theoretical outlines of which fail to find their counterparts in Cairo practice. With the melodic modes the situation is rather different, for a considerable number were shared, with common elements sometimes being masked by differences in descriptive technique. However, it has also been seen that there are several where a common name flatters to deceive, while yet others were clearly regionally specific, the result being a significant degree of overlap counterbalanced by differences sufficiently distinctive to justify speaking of the early fourteenth-century Cairene modal repertoire as a largely autonomous corpus rather than just a local inflection of a normative international system.

The evidence Ibn Kurr lays before us thus undermines the rather cosy view, derivable from the accounts of al-Urmawī, Šīrāzī, Marāġī and other late Systematist theorists,[41] of the steadily widening dominion of a single great tradition. Mention of that tradition has usually been accompanied, as a common-sense precautionary qualification, by a reference to the likelihood of some degree of local variation, but it is only with the *ġāyat al-maṭlūb* that it becomes possible to confront Systematist analyses with a wholly independent account operating at the same level of descriptive specificity, in the event one that not only offers a different theoretical perspective but exposes to scrutiny hitherto unfamiliar entities that, whatever the common ground, form a quite distinctive profile: regional specificity is here sufficiently strong to warrant postulating a different configuration of the Middle Eastern art-music world, one in which the local assumes greater weight, while the Systematist account, as we move towards and through the fifteenth century, needs to be viewed increasingly as an obeisance to the intellectual authority of al-Urmawī, its gradual divorce from the realities of practice eventually being dramatically revealed by the gulf between the twin ancient and modern accounts offered by al-Lāḏiqī.

For the first half of the fourteenth century it does not appear possible to take the argument further. The question of whether the individual characteristics of what we might term the Cairo style as described by Ibn Kurr were to suffer erosion through the diffusion of prestigious eastern norms, or whether they indicated a fault line that might grow wider before shrinking again towards the end of the Ottoman period, lies beyond the confines of the present study. However, the *ġāyat al-maṭlūb* certainly has a significant potential contribution to make to the investigation of subsequent developments, above all by comparing its account of the melodic modes to later ones that are morphologically akin, presenting not scales but melodic matrices: it will surely be profitable to re-evaluate, alongside al-Lāḏiqī, such late fourteenth-century works as the *risālat al-kaššāf fī 'ilm al-anġām* by al-Ḥaṣkafī and the *kitāb al-in'ām fī ma'rifat al-anġām* by al-Ṣaydāwī[42] in the light of Ibn Kurr's highly individual and revelatory account.

[1] See Figure 3.1 and Neubauer 2008–9.

[2] The octave scale is described as /1 2- 3- 4 5- 6♭ 7♭ 1′/ and the basic unit as /1 2- 3♭ 3/. For the relationship between them see Wright 1978: pp. 130–1. Cases where the tetrachord + pentachord octave analysis is unconvincing are *buzurg* and *kardāniya*.

[3] With notes then being changed, thereby altering modal identity while maintaining the melodic contour. The last substitution results in a shift to *zīrafgand*, the span of which is less than a fourth.

[4] The perception of the tetrachord as a crucial structural element is further apparent in the Mubārakšāh commentary on the notations in the *kitāb al-adwār* (see D'Erlanger, 1938: p. 563).

[5] Wright 1978: p. 174.

[6] In the section on *jārkāh*, fol. 31v.

[7] *masālik al-abṣār*, p. 353.

[8] Written *zarwakand*.

[9] In ch. 10 of the *kitāb al-adwār* (*fī tašāruk al-naġam*), p. 113.

[10] p. 101.

[11] For which al-'Umarī uses the term *naġam*.

[12] The term he uses this time is *bard* (< *parda*).

[13] *masālik al-abṣār*, p. 356.

[14] Ibid.: pp. 354–5. It is described as in *rāst* 'forming a braid with two *āwāz* modes among four *barda* modes' (*muẓāfir fī arba' bardāwāt āwāzayn*, where *muẓāfir*, which makes no sense, must be an error, reflecting a common phonetic confusion, for *muḍāfir*, the metaphor of 'braiding' being particularly apposite here).

[15] Neubauer (2010–11: pp. 258–66) reviews the evidence indicating that it was by no means exceptional for composers to use notation, but there is little to suggest that it was also used for transmission, and it is certainly the case that at least from the fifteenth century on the major form used for the preservation (and hence partially, transmission) of repertoires was the song-text collection, which never included notation.

[16] Neubauer 1997: pp. 323–4.

[17] *masālik al-abṣār*, p. 361.

[18] Ibid.: p. 352.

[19] Ibid.: p. 332.

[20] Possibly to be explained by the fact that it was written during his later years, which were spent in Damascus.

[21] Ibn Kurr also uses *šaškāh* to refer to a note, saying that every *sākāh* note is also a *šaškāh* for the second *rast* below (so that, presumably, although this is not said, every *dūkāh* is also a *banjkāh* for the second *rast* below).

[22] Whatever the attitudes of the musicians concerned, one might like to consider this process as a minor example of diffusion that needs to be viewed within the much larger scheme (far wider in spread and considerably longer in time scale) traced with such impressive erudition by Picken (1975: pp. 557–609, and particularly pp. 600–9).

[23] A too neatly reductive and dubiously schematic arrangement, especially as we are told later (p. 3) of names that had not been included: *māḫūrī* (in earlier texts an exclusively rhythmic term, just to confuse matters further), *maḥṣūr* and *maškūl* (not attested elsewhere): we are merely told that naming (i.e. re-naming) these was delayed, just as with other modes perceived as combinations (*tarkīb*) or derivations (*šāḏḏ*).

[24] *kitāb al-adwār*, pp. 161–2.

[25] It is more like *nayrūz*.

[26] It is, though, a little closer to al-Urmawī's account.

[27] *kitāb al-adwār*, p. 147.

[28] See the comments in Neubauer 2008–9, where it is suggested that it was included in order to distinguish the form used in this composition from an alternative disposition, although what the consequence would have been is unknown, as the melody is just as close or distant to one as to the other.

[29] Some idea of the texture of the evidence may be gained from al-Baqlī 1984. Hardly unexpected, in consequence, even if still regrettable, is that there is no mention of music in C.F. Petry (ed.), *The Cambridge History of Egypt*, vol. 1: *Islamic Egypt, 640–1517* (Cambridge, 1998), despite the fact that it devotes chapters to both art and archaeology and culture and society. Nor does it figure as a topic worth exploring in *The Review of Mamluk Studies*. It was thus perhaps predictable that the brief paragraphs in Shannon 2010, beginning from the Fatimid period, should simply take refuge, without any supporting evidence, in the familiar trope of presumed (but undemonstrated) parallels with the aesthetics of art, architecture and calligraphy.

[30] See al-Baqlī 1984: pp. 110–1.

[31] According to Farmer (1965: p. 62) it was 'probably written in Egypt', but no evidence is adduced. The dating to the fourteenth century given in Farmer [1976] may be thought less likely that the dating to the fifteenth century given in Farmer 1965.

[32] Reproduced in both Farmer 1965 (Pl. V) and Farmer [1976]: p. 103. The *kašf al-humūm* also mentions a terminological difference, the *qānūn* being known as *sanṭīr* in Egypt.

[33] Farmer [1976]: p. 102; al-'Umarī (*masālik al-abṣār*, p. 359) refers to al-Badr al-Irbilī as *sayyid al-jankayn*. With al-Bilbaysī (*al-mulaḥ wa-l-ṭuraf*, British Library Add. 19411, fol. 76r–v) we encounter a female ensemble consisting, in the order in which they are presented, of a singer, a flautist (*mušabbiba*), a dancer, a lute player and a harpist (*jankiyya*).

[34] See e.g. Farmer [1976]: pp. 87, 89.

[35] Exceptional is a group portrayed in al-Jazarī's *kitāb fī ma'rifat al-ḥiyal al-handasiyya* (Farmer [1976]: p. 93) where to flute, lute and frame drum is added a slender, waisted double-headed drum (*kūba*), laid horizontally across the player's knees, possibly suggesting an association with a more popular style.

[36] See e.g. the discussion in Grabar 1984.

[37] On which see Sawa 1989.

[38] Cairo, 1925 (vols 4, pp. 132–327 and 5, pp. 1–122).

[39] A faint hint of such overlap may, though, be detected in al-Jawharī's *nuzhat al-nufūs* (vol. 1, p. 169), where mention is made, amongst those who died in the year 790/1388, of five musicians (*aṣḥāb al-naġam wa-'l-āla*), one a secular singer (*muġannī*), one a scholar (*mu'allim*), one a singer of *madīḥ* (*mādiḥ*) and one the chief muezzin of the Azhar mosque.

[40] The major witness here is al-Lāḏiqī, who gives an account of eight rhythmic cycles known to the ancients (*mutaqaddimūn*) of which, according to him, only two survive, followed by an account of 18 known to the moderns (*muta'aḫḫirūn*) to which he adds a further three deemed to be rare and nine no longer in use (*al-risāla al-fatḥiyya*, British Library Or. 6629, fols 78v–82r and 83v–88v, tr. in D'Erlanger 1939: pp. 470–80 and 485–98).

[41] Cited in Chapter 1, footnote 27.

[42] Needless to say, there are later texts that would also need to be taken into account, for example two significant anonymous texts, *al-šajara ḏāt al-akmām*, ed. Ġ. 'A. al-M. Ḫašaba and Ī. Fatḥ Allāh (Cairo, 1983), and a Judaeo-Persian fragment recently published and analysed in Neubauer 2010–11.

Chapter 8
Text and Edition

Text

The one known manuscript of the *ġāyat al-maṭlūb* is held in the British Library, entered in the accessions list for 1923 as Or. 9247. There is, 90 years on, still no descriptive catalogue entry for it. Brockelmann cites the work as *ġāyat al-maṭlūb fī fann al-anġām wa-'l-ḍurūb*, [1] but despite the accessibility of the manuscript its existence failed to be noted either by Brockelmann or, in the first (and in some ways superior) version of his invaluable bibliographical survey of Arabic musicological literature, by Farmer. [2] His reference to the *ġāyat al-maṭlūb* (item 224) is derived from Ahlwardt's catalogue of the Berlin Royal Library, where it is cited among a list of musicological works, again with the title *ġāyat al-maṭlūb fī fann al-anġām wa-'l-ḍurūb*. [3] In Farmer's revised 1965 version of the *Sources of Arabian Music* the omission is remedied (in item 280) although even here the catalogue number of the British Library manuscript is absent and the title is still not that on the manuscript itself. [4] Nor did the reference in this publication to the existence of a British Library copy prevent it remaining, inexplicably, unrecorded in the successor bibliography by Shiloah, despite its greater range, including what appears otherwise to be a thorough coverage of the British Library holdings. [5]

A later citation of the work occurs in a bio-bibliographical survey by al-Rajab, but instead of referring to the British Library manuscript it cites a copy stated to be held in the Swiss National Library. [6] This is more than a little puzzling, as the Swiss National Library does not collect this kind of material and, on being contacted, denied all knowledge of such a manuscript. [7] Unfortunately, it has not proved possible to investigate further, as the copy that al-Rajab claims to have made of this manuscript has itself been lost: it was presumably included among the papers, left at his death, which have reportedly been stolen. [8] Thus without any positive trace of another source the possibility cannot be excluded that his identification was mistaken, thus raising the question whether his copy might actually have been a microfilm of the British Library manuscript. However, this cannot have been the case: a microfilm of the British Library copy was certainly made, but although the British Library records do not state for whom, they do give the date, 17 December 1987, [9] whereas al-Rajab's book was published in 1982. It follows that his copy must have been made from another manuscript, the whereabouts of which are at present unknown.

That being so, for the moment the British Library copy of the *ġāyat al-maṭlūb* unfortunately remains, as far as scholarly enquiry is concerned, a *unicum*. The Library records appear to contain no information about the history of the manuscript beyond the date under which it was recorded in the accessions list, and the year is confirmed by a handwritten note on the back flyleaf: 'bought of Abdel Ghani Shehab 9 June, 1923'. The accessions list gives the name of the author as Abu 'Abdallāh Muḥ. b. 'Īsā b. Ḥasan b. Karrā al-Baghdādī, Karrā possibly resulting from reading the *alif* of the following definite article twice. Alternatively, both Karrā and Karā, the form given by Farmer in the original version of his *Sources of Arabian Music*, [10] could have been based upon Ahlwardt's entry, where the name is given, in Arabic script, as *krā*. But whether derived through this route or directly, the source is surely Ḥājjī Ḫalīfa's *kašf al-ẓunūn*, which provides both the version of the title with *fann* rather than *'ilm* and the orthography of the name used by Ahlwardt and transcribed by Flügel in his translation as Kerrá. [11] In his revised edition, however, Farmer corrects this to Kurr. [12]

Otherwise, the British Library accessions list gives only an approximate dating, to the fourteenth–fifteenth centuries, and the size, 12°.

The manuscript consists of 47 folios, the work ending on fol. 47r, while fol. 47v is filled with extraneous (but still music-related) matter in another hand. The pages measure 17.5 × 12.5 cm and the text block 12 × 7.3–7.5 cm. There are 13 lines of writing per page at a distance of 1 cm from each other, the text block having been marked out with a *masṭar*. [13] Rubrics are in red ink, as are the mnemonic specifications of the rhythmic cycles, and the hand is a clear *nasḫ*, with partial (and rather unreliable) vowelling and only intermittent pointing. As there is no colophon the scribe is unknown and the manuscript undated, but the character of the hand suggests that a fourteenth-century date would be more likely. The paper is a highly polished woof paper, with occasionally visible chain lines at a distance of 2.5cm, typical of Mamluk production. [14]

The present title page (fol. 1r) contains in addition some only partly legible identifications of previous owners, one a certain al-Dawadārī, [15] and another being accompanied by the date 902 (= 1495–6). It may originally have been blank, as the title itself is in a different hand to the main text (which begins on fol. 1v). Although al-Rajab quotes it as *ġāyat al-maṭlūb fī 'ilm al-anġām wa-'l-ḍurūb* on the authority of al-Ṣafadī, he notes that Ibn Taġrībirdī gives it as *ġāyat al-maṭlūb fī fann al-anġām wa-'l-ḍurūb*, [16] and this is the form cited by both Brockelmann [17] and, despite his referring to the manuscript, Farmer. [18] Given that the form with *'ilm* on the title page is a later addition, its presence in this manuscript does not automatically demonstrate that the form with *fann* is necessarily incorrect: both are formulaic, and it is not inconceivable that Ibn Kurr could have switched between them. Nevertheless, the form with *'ilm* is confirmed by al-Ṣafadī, [19] a personal acquaintance of Ibn Kurr whose evidence may be considered decisive. Also ascribed to Ibn Kurr, by al-'Alwajī, is a treatise entitled *ġāyat al-su'āl fī ma'rifat al-alḥān wa-'l-īqā'*, but rather than indicating the existence of a separate work this is surely no more that yet another variation on the same title and, lacking a rhyme, a rather lame one at that. [20] Also suspiciously similar is *al-kanz al-maṭlūb fī al-dawā'ir wa-'l-ḍurūb*, the title of a work ascribed to a contemporary of Ibn Kurr, Jamāl al-Dīn al-Dāsinī (d. 1347) or, in the *masālik al-abṣār*, al-Daysanī, with the title given as *al-kanz al-maṭlūb fī 'ilm al-dawā'ir wa-'l-ḍurūb*. [21]

The general state of the manuscript is fairly good, although there are occasional stain marks, more visible towards the end, probably caused by humidity, and, rather more seriously, areas on one or two folios where the ink has faded badly, rendering the text almost illegible in places. The text is complete except, in all probability, for the loss of a single folio. The problem concerns the credibility of the transition from the first page (fol. 1v) to the second, and there are no catchwords to help us and no original foliation (there are, however, three later foliations, one Arabic and one European to the top left, and another European one, sometimes quite faint, to the top right). The first page ends with the final part of the standard formula for invoking God's blessings upon the Prophet and then his family and companions (*wa-'l-ṣalāh 'alā sayyidinā*

Muḥammad wa-ʿalā ālih wa-aṣḥābih) and at first sight the beginning of fol. 2r seems unrelated. However, if we have regard to the weaving into the formula of *sajʿ* elements, we find that it has the same rhyme:

wa-’l-ṣalāh ʿalā sayyidinā Muḥammad
*allaḏī tafajjarat minh yanābīʿ al-**ḥikam***[22]
wa-sarat aqwāluh fī al-afhām
*fa-’stanārat minhā mawāḍiʿ al-**ẓulam***
wa-ʿalā ālih wa-aṣḥābih/
fī anwāʿ al-riyāḍāt
wa-ahl al-quwwah fī al-šadā’id
*iḏā istaʿar ḥarruhā wa-**’zdaḥam***

Syntactically, it is possible to construe the beginning of fol. 2r as a continuation, and given that the first part of the formula is followed by a rhyming insert it would be reasonable to find the second part followed by a similar appendage, and it is in fact one the syntax of which is also similar: each formula is followed by a ternary structure in which the second member is linked by *wa* ‘and’ to the first, and the third is a continuation of the second, upon which it is dependent. But however neat the parallelism, it would appear to be fortuitous, for semantically the relationship cannot hold: one would expect the continuation to be in praise of Muḥammad’s family and companions, whereas the subject-matter of the text as it stands effects a jarring transition, via a possible reference to Sufi exercises (*riyāḍāt*), to the current rulers when faced with critical situations. The conclusion that the text is here discontinuous, and that the presence of the same rhyme at the head of fol. 2r is adventitious, is reinforced by the layout of the final line of fol. 1v: the latter half is compressed, suggesting strongly that the scribe wished to fit in the end of the sentence (or section) without having it spill on to the next page, where new subject matter would be broached: if there were a continuation it would have been natural for the rhythm of the script to be maintained and for the last word to be taken over.

As the nature of the script suggests that the manuscript is probably to be dated to the fourteenth century, it was probably written close to, or even within, the lifetime of the author. The possibility of it being an autograph may, however, be dismissed, as it contains not only occasional examples of dittography and haplography but also sundry evident misreadings, e.g. *ṯānī* for *ta’tī*, that are clearly the mistakes of a copyist. Yet from the perspective of Classical Arabic grammar it also contains various deviations difficult to dismiss as a copyist’s errors. Discussed below, these largely conform to the norms of what is generalized as Middle Arabic, most frequently exhibited in texts representing the language level of literate native speakers (often but not necessarily non-Muslim) who have not had a thorough education in Classical Arabic, and hence do not master all the features, particularly regarding the case system and verb morphology, that differentiate it from the spoken equivalents. Although a common enough phenomenon,[23] the presence of such elements in this particular text is nevertheless rather surprising at first sight, given what we are told about the author’s scholarship and, more pertinently, the evidence of the introduction to the *ġāyat al-maṭlūb* itself, for this demonstrates Ibn Kurr’s ability to handle the complex resources of literary style and its morphological and syntactic constituents. However, absent from this section of the work are any examples of the areas where the remainder tends to deviate from Classical Arabic norms, in particular the syntax of numerals and the concord system of the dual and the sound masculine plural. Taking into consideration the lack of any attempt at literary polish beyond the introduction, we may quite simply regard the work as falling stylistically into two discrete parts, each with its own distinct linguistic register: one is a consciously and, given its purpose, necessarily literary exercise, the other a technical survey of a field where stylistic polish and the linguistic expertise associated with it were unnecessary, even, it might be conjectured, an impediment, so that it would be a sound practical step for Ibn Kurr to set aside grammatical punctiliousness at least with regard to the syntax of numerals, anticipating a readership more at home in this area at least with a register coloured by certain Middle Arabic features reflecting spoken norms.

Edition

It would be tempting to respect this shift of register by reproducing the text as it stands, especially as there is no agreed scholarly policy for dealing with Middle Arabic elements. Nevertheless, a certain amount of intervention is required, if for no other reason than to rid it of instances of dittography and to restore evident omissions. The former are indicated in the apparatus, while the latter are placed within square brackets; further, curved brackets (parentheses) surround additions or corrections made in the margins, and curly brackets enclose the few places where the text is damaged or effaced to a degree that makes the reading conjectural. But there are also other features that require attention: for example, the frequent omission of pointing means that the correct reading cannot always be supplied automatically, and that a choice sometimes has to be made between different possibilities, particularly with regard to verb forms. In particular, there are a number of sentences in which both the second person active and the third person passive give equally good readings, and where there is no contextual indication the choice made is editorial (and is not signalled in the apparatus). It may, indeed, vacillate: preference has generally been given to the second person, guided by the presence of a number of paragraphs beginning ‘when/if you wish’, but there are other areas where the passive formulation seems the more appropriate, even in the absence of explicit evidence.

With regard to orthography, the approach taken has been to adjust to conform to current norms. Accordingly, the most obvious amendment concerns’ (*hamza*), which has been supplied throughout, despite being only very rarely represented in the original. Its absence is doubtless a reflection of the pronunciation of the day, but as this is not the place either for an analysis or for a presentation of the text as a linguistic object consideration may be given to the comfort of the modern reader, especially when the original orthography can be reconstituted quite easily. Thus e.g. *tā* is replaced by *tā’, šay* by *šay’, ʿurayjā* by *ʿurayjā’, hāwlā* by *hā’ulā’* , and patterns such as *fāyil* and *mafāyil* become *fā’il* and *mafā’il* .[24] Another automatic alteration concerns *tā’ marbūṭa* , which generally appears in the original as *h* ,[25] but it may be noted that as well as being supplied where expected it is added to *dūkāh* and related forms, since these are construed as feminine, with the dual *dūkātān* and with a suffix pronoun taking e.g. the form *dūkātuh* . Also to be noted is the extra *wāw* supplied in *ru’ūs* , the original spelling having only one. Unchanged, in contrast, is the spelling of *mūsīqā* with *alif* , clearly indicating the abandonment of the older *mūsīqī*, while elsewhere the spelling of *alif maqṣūra* with *alif*[26] has been corrected (and noted in the apparatus, as it is not a consistent feature).

Beyond this point, as we move into accidence and syntax, editorial intervention becomes more contentious and, it has to be said, less than rigorously systematic. It is primarily in the number system that we encounter divergences from Classical Arabic attributable to the interference of colloquial forms. Usage is somewhat variable, and editorial practice likewise: broadly, the approach has been to respect the more frequent non-Classical features that are maintained throughout, or at least in the majority of cases, thus reserving interference, that is, regularizing according to Classical norms, to those areas where consistency is clearly lacking. However, the apparatus records every such change, so that the original can be readily restored.

The following particular points may be noted with regard to number:

Only one dual imperfect verb appears, *yaḥuṭṭā*: this is amended to *yaḥuṭṭān*. In the dual of nouns we encounter the forms *dūkātān* and *sākātān*. Classical case distinctions are sometimes maintained (*huwa naġmatān, lah far‘ān, min īqā‘ay naqratayn, īqā‘āh al-fāṣilān*), and the sporadic appearance of a plural adjective qualifying a dual noun (*taj‘al lah īqā‘ayn min naqratayn fawāṣil*) is unsurprising. The nominative may replace the oblique (*fī naġmatān, min dūkatān*), in *bayn al-rastān naġmatān* presumably by attraction, but the more normal change is for the oblique to replace the nominative (*wa-dawrayn min aṣl al-fāḫita*). The preference for the oblique in the predicate of nominal sentences (*hiya dā’iratayn, hiya ṣawtayn, humā dawray al-fāḫita*) might be thought to suggest hypercorrection by analogy with verb + accusative object, but such a possibility is weakened by the fact that it also occurs with the topic after *ammā* (*ammā far‘ay ṯānī ṯaqīl*)[27] and by the frequent occurrence of the nominative after *kān*, thus making it more likely that this feature should be attributed to a reduction of both case markers to a single colloquial form (e.g. *dawrēn* or even *dōrēn*).[28] Classical nominative forms have been supplied in such cases. With the numerals the gender sometimes diverges (*aḥaduhumā* for *iḥdāhumā*, *iṯnā* for *iṯnatā*), and these too have been adjusted to Classical norms.[29]

With the 3–10 cardinal numerals gender agreement is inconsistent. The principal counted nouns are *ḍarb, rub‘, naqra, ḥarf, rāḥ, ṣawt* and *naġma*; while others are *naġam, rast, ramal, dūkāh* and *sākāh*. With *naġam, rast* and *ramal* agreement is regular (*sittat rusūt*), although there is one exception, presumably by attraction, in *tis‘ naġamāt wa-arba‘ rusūt wa-ḫams dūkāh*. As in this last example, no plural is provided for *dūkāh* and *sākāh* (*ḫams sākāh*). With *ḍarb, rub‘, naqra* and *naġma* we have, regularly, *arba‘at ḍurūb/arbā‘, ḫams naqarāt/naġamāt*, but there is an exception in *ṯalāṯa naġamāt*, and elsewhere concord is variable: *ḥarf* is often construed as feminine (*arba‘ ḥurūf*) and *rāḥ* regularly so (*ṯalāṯ rāḥāt*, although there is one instance of *ṯalāṯa rāḥāt*),[30] despite the fact that beyond the cardinal number + noun possessive construction it is clearly signalled as masculine, most obviously in *ḫams rāḥāt arba‘a bi-’l-kasra wa-’l-ḫāmis bi-’l-fatḥ*. Sometimes the feminine appears, it seems, by attraction, as in *huwa ṯalāṯ aṣwāt min ṯalāṯ naqarāt min ṯalāṯ ḥurūf* (but compare *ṯalāṯa aṣwāt min ṯalāṯ naqarāt min ṯalāṯ rāḥāt*), and with a following numeral we have *al-naġamāt al-ḫamsa* as well as the regular *al-rusūt al-arba‘a*. All such variations have been kept, and likewise the common use of *ṯamān* for *ṯamānī* (e.g. *ṯamān rāḥāt, min ṯamān ḥurūf*).

In the 11–19 range the second element is uniformly *‘ašar*, and this has been retained throughout, but otherwise Classical norms have been imposed for 11 and 12. With 11 one may note an example of gender attraction (*hiya iḥdā ‘ašar min al-ḍurūb*), and the odd *iḥdā (?) wa-‘ašar rāḥan*, while with 12, as with the dual noun, there is a lack of consistency with regard to case and gender. We thus encounter e.g. *min iṯnay ‘ašar naqra* and, possibly as a hypercorrection, *zaman iṯnā ‘ašar rāḥan* (with *rāḥ* now being construed as masculine), while *huwa iṯnay ‘ašar naqra* provides, in addition to gender confusion, another example of an oblique case predicate of a nominal sentence. Beyond 12, Classical gender distinctions may be maintained for the units, as in *bi-arba‘ ‘ašar naqra min arba‘at ‘ašar ḥarfan*, with *rāḥ* now taking masculine agreement (*sittat ‘ašar rāḥan*), but there are also examples of gender indeterminacy, as in *sittat ‘ašar naqra* vs *sitt ‘ašar naqra*, and paired nouns may again go in parallel, as with *sittat ‘ašar naqra min sittat ‘ašar ḥarfan*. Such variations have been kept.

With 20 and above the sound plural case markers, as with the dual, are unstable, so that alongside *arba‘a wa-‘išrūn rāḥan* we encounter *zaman ‘išrūn rāḥan bi-arba‘īn naqra* and *takmilat arba‘a wa-‘išrūn rāḥan*, presumably examples of hypercorrection. These have been regularized, as has the dual element of 22, which is generally masculine, as in *bi-’ṯnayn wa-‘išrīn naqra min iṯnayn wa-‘išrīn ḥarfan*. The 3–9 units are uniformly masculine, as in *bi-arba‘a wa-‘išrīn naqra min arba‘a wa-‘išrīn ḥarfan* and *bi-arba‘a wa-arba‘īn naqra min arba‘a wa-arba‘īn ḥarfan*, and they have been left undisturbed.

Turning now to the ordinals, we find that *ūlā*, unless used in isolation (*naqra fī al-ūlā*) is restricted to *al-muqaddima al-ūlā*, while in the body of the text we encounter e.g. *al-tā’ al-awwala*.[31] With 2nd, *ṯānī* may be encountered in place of *ṯān* (*far‘ ṯānī*), but otherwise there are no irregularities within the 2–10 range, with both *ḥarf* and *rāḥ* having masculine agreement (*al-naqra al-ṯāniya, al-ḥarf al-rābi‘, al-rāḥ al-sādis, al-tā’ al-tāsi‘a*). There is though, a preference for placing the ordinal first (*ṯānī/ḫāmis/sābi‘/tāsi‘ naqra, rābi‘/‘āšir rāḥ*). In the 11–19 range we find, as with the cardinals, that the second element is uniformly *‘ašar*. Where the ordinal follows the noun, gender agreement with the unit is straightforward, so that we have e.g. *al-nūn al-ḥādiyata ‘ašar, al-ḥarf al-ṯāniya ‘ašar* and *al-naqra al-rābi‘a/al-sādisa ‘ašar*. As with the 2–10 range, there is a preference for placing the ordinal first, opting for the feminine for 11th (with *ḥādiyata ‘ašar ḥarf* as well as *ḥādiyata ‘ašar naqra*), but thereafter using the masculine (*ilā ṯānī ‘ašar rāḥ, ṯāliṯ ‘ašar naġma*) and masculine and feminine indifferently with *naqra*, so that we have e.g *ṯāliṯa/ḫāmisa/tāsi‘a ‘ašar naqra* vs *ṯāliṯ/ḫāmis/tāsi‘ ‘ašar naqra*, and also with *ḥarf* (*ḫāmisa ‘ašar ḥarf* vs *ḫāmis ‘ašar ḥarf*). Possibly in accord with Classical Arabic norms is *takmilat ṯāniya ‘ašar rāḥ*, but it may be suspected that *ṯāniya* was realized as *ṯānī*.

With *al-ṯāniyata ‘ašar naqratan* (so vowelled in the accusative) one encounters interference from the syntax of the cardinal numbers, and further examples occur with the higher numbers, as in *ilā al-ḥādī wa-’l-‘išrīn ḥarfan, ilā rābi‘ wa-‘išrīn rāḥan* and *min ḫāmis ‘ašar ḥarfan*. These have not been altered. Within the numeral itself the expected case ending predominates, so that we have e.g. *ṯāliṯa wa-‘išrūn naqra* and *ma‘ tāsi‘a wa-ṯalāṯīn naqra, al-tā’ al-ḥādiya wa-’l-‘išrūn* and *min al-tā’ al-ṯāliṯa wa-’l-arba‘īn*, but exceptions occur, such as *hiya al-ḥādiya wa-’l-ṯalāṯīn naqra, al-ḥarf al-ṯānī wa-’l-‘išrīn* and *min al-tā’ al-ṯāniya wa-’l-ṯalāṯ* *ūn*. These have been regularized, as has *huwa al-ḥādī wa-’l-‘išrīn naġma*, masculine by attraction. However, no attempt has been made to impose uniformity on the vacillations with regard to gender which, as before, particularly concern *naqra*, examples being: *ma‘ ṯāliṯ wa-ṯalāṯīn naqra* vs *ma‘ al-ṯāliṯa wa-‘išrūn naqra, hiya ṯāliṯ wa-‘išrūn naqra* vs *hiya ṯāliṯa wa-‘išrūn naqra*. To be noted again is a preference for having the ordinal precede the noun.

Other points of syntax where Classical norms have been imposed concern:

- the use of the nominative in place of the accusative e.g. *yakūn al-ḥijāzī hā hunā muqaddar, mā kān ṣawtuh ḥadd/layyin* and *yusammā dawr* (alongside the less frequent orthodox accusative, as in *yakūn rubā‘iyyan, sākāh kānat ramalan*)
- the use of the nominative plural in possessives (*huwa zaman ‘išrūn rāhan*)
- marking as masculine verbs preceding a possessive the first noun of which is feminine (*ya’tī ṣifatu ḏālik, lā yusta‘mal naġmat al-ramal*)
- cases of number attraction such as *ta’tī ṣifatuhumā fī mawḍi‘ihimā*
- omission of *fa-* after *ammā* (*ammā ḥiṣār al-iṣbahān sākāh*).

In contradistinction, features that have been allowed to stand include:

- plural participles and suffix pronouns (*ammā al-bāqūn fa-ya’tī ḏikruhum* and *ṣifatuhum* instead of the Classical *ammā al-bāqiya fa-ya’tī ḏikruhā* and *ṣifatuhā*) and a plural verb preceding its subject (*yusammūnah al-‘ajam nāsāz*)
- the one instance of the colloquial morphology of doubled verbs (*matā ḥaṭṭaytahumā* [presumably realized as *ḥaṭṭētahumā*] *‘alā rast šālat minh*)
- the inclusion of *fa* after *iḏā*: beyond the normal *iḏā rakkabt … kān …, iḏā aradta … fa-’‘lam …* we encounter, typically, *iḏā aradta … fa-taj‘al …*, and *iḏā aradta … fa-takūn …* (whereas the construction with *in* is more orthodox: *in utiya bi-far‘ … kān far‘an …*); and similarly with *matā*: *matā lam tuḫāliṭha … fa-takūn …*
- apposition with change of case (*tūqi‘ īqā‘ayn īqā‘ … wa-īqā‘ …*)
- the use of *āḫar* as masculine singular throughout (*min awwal rāhayn āḫar, bi-ṯalāṯ naġamāt āḫar, dawrayn āḫar fāḫita*)
- cases of gender attraction such as *ammā ḥiṣār al-zīlakand fa-hiya …* and *wa-naġma min al-ramal allatī …* (the latter alternatively to be explained as an extension of definite status to *naġma*).

Finally, as a matter of syntactic habit one may note the prevalence of the topic + comment structure, as in *sitta kullu wāḥid far‘*, and especially where the following noun has a suffix pronoun referring back, as in *al-ḥijāzī mabda’uh min sākāh*.

[1] *Supplementband* II, 1938: p. 173, referring to Ibn Taġribirdī.

[2] Farmer 1940.

[3] Ahlwardt 1893, item 5536/15.

[4] Farmer 1965.

[5] Shiloah 1979 and 2003.

[6] al-Rajab 1982: p. 49.

[7] Information kindly supplied by Dorothee Scholian in a very helpful and prompt reply to an email enquiry.

[8] Personal information from his son, Ṣuḥayb al-Rajab.

[9] Information kindly supplied by Ursula Sims-Williams. This is doubtless the copy ordered by Eckhard Neubauer (personal communication).

[10] Farmer 1940, item 224, on which authority the same form appears in the bibliography of Wright 1978.

[11] Ḥājjī Ḫalīfa, *kašf al-żunūn*, vol. 4 (1845), p. 304.

[12] On the authority of Ibn Ḥajar's *al-durar al-kāmina*.

[13] An exception is fol. 25, which has 14 lines of text both *recto* and *verso*, and it is possible that the *masṭar* was not used here (no ruling is visible). There is otherwise nothing unusual about this folio.

[14] For much-needed codicological advice I am indebted to Anna Contadini.

[15] Someone related to a *dawādār*, a senior and powerful Mamluk official.

[16] al-Rajab 1982: p. 49. However, the *dār al-kutub* edition of Ibn Taġribirdī's *al-nujūm al-zāhira fī mulūk miṣr wa-'l-qāhira* (vol. 10, n.d., p. 331) has *ġāyat al-maṭlūb fī al-anġām wa-'l-ḍurūb*.

[17] 1938: p. 173.

[18] 1965, entry 280, p. 55.

[19] *al-wāfī bi-'l-wafayāt*, vol. 4, ed. S. Dedering (Wiesbaden, 1959), pp. 305–6.

[20] 1964: p. 11.

[21] vol. 10, pp. 352–3. Farmer (1965, item 281) mentions a further treatise on modes and rhythms, by al-Anbārī, that he suggests might be identified with the *ġāyat al-maṭlūb*. This is sufficiently speculative to be disregarded.

[22] The possible reading *ḥukm* is excluded by the following *ẓulam* (*ẓulm* also exists, but is semantically unacceptable here).

[23] See e.g. Blau 1966, 1967a and 1967b, Lentin 2008.

[24] For *hamza* in general, including phonology as well as orthography, see Blau 1966: pp. 92–105 and 137.

[25] Ibid.: p. 122.

[26] Ibid.: p. 81.

[27] The scribe seems to have been rather confused about *ammā*, providing both accusative and genitive vowellings (*ammā muḥarrikahu* and *ammā muḥarrikihi*) as well as the nominative (*ammā far‘āh*).

[28] Blau 1967a: p. 317 and the discussion following.

[29] Most of the following feature is exemplified in the course of the extensive treatment of numerals in Blau 1967a: pp. 366–87.

[30] There is just one occurrence of the plural of *šanbar*, in the feminine (*arba‘ šanābir*).

[31] Hence the unpointed feminine dual may be read as *awwalatān* in preference to *ūlayān*.

Glossary

The following list gives glosses and citations not just for the technical terms in the *ġāyat al-maṭlūb* but also for all the other words that could be deemed to have a musicological significance in context. Not covered, however, are the names of modes and rhythmic cycles, unless some particular feature is being foregrounded, and any technical terms cited from other texts that do not occur in the *ġāyat al-maṭlūb* (all of which can be located from the index). It is representative rather than exhaustive in that only a selection of citations is given for terms that occur frequently, and sometimes only one instance is given if all occurrences are in identical or virtually identical contexts. The order is alphabetical, but words from the same root that are consequently separated are cross-referenced. The separation of letters by diacritics is respected, and ‘ is treated as a separate entity, the order adopted being:

a/ā ’ b d ḍ f ‘ ġ h ḥ ḫ i/ī j k l m n q r s ṣ š t ṭ ṯ u/ū w y z

a‘ād to repeat [→ *‘ād*]
23r *iḏā a‘ād yufawwit zamanan min dawr bi-lā ‘amal*
a‘ār to add, lend, supplement
17v *aṣl al-fāḫita ‘ašr rāhāt wa-tu‘īr lah min rāhayn*
a‘lā higher (in pitch) [→ *‘uluww*]
24v *yaḥuṭṭ al-a‘lā ‘alā al-asfal*
36r *ḥiṣār al-iṣbahān a‘lā min ḥiṣār al-zīlakand fī al-ṭabaqa*
ahbaṭ lower in pitch [→*habaṭ* , *hubūṭ*]
42r *hāḏā ahbaṭ min hāḏā bi-naġma*
aḥadd highest in pitch [→*ḥādd*, *ḥidda*]
25v *awwaluhā layyin wa-āḫiruhā aḥadd naġma*
āḫir end
46v *tazīd kullan minhumā naġma fī āḫirih*
āḫir al-hubūṭ lowest pitch
25r *wa-* [*huwa*] *min āḫir al-hubūṭ ilā nihāyat al-‘uluww*
āḫir al-līn lowest pitch (synonymous with above) [→*layyin*]
25r *min āḫir al-līn ilā nihāyat al-ḥidda*
āḫir maḥaṭṭ /*maḥaṭṭa* lowest note and finalis [→*ḥaṭṭ*]
29v *bi-zankulā natajat min rast huwa āḫir maḥaṭṭih yašīl ilā rast nataja minh*
29v *naġmat hāḏā al-rast allaḏī huwa āḫir maḥaṭṭat ra’s al-hank min al-līn*
34b *hāḏā āḫir maḥaṭṭ al-iṭbahān*
āla → *ġayr al-āla*
antaj to produce, generate [→ *nataj*]
39v *li-yaẓhar fasād mā qālath al-‘ajam inn arba‘a antajat ṯamāniya*
aqām ilā to allocate, attribute to
4r *kān yuqīm al-aṣwāt ilā al-ṯaqīl al-awwal wa-ilā al-ṯaqīl al-ṯānī wa-mā ba‘dahā min al-marātib*
aqwā (or *qawwā*) to strengthen, reinforce [→ *quwwa*]
40v *yuqwā hāḏā al-naġam … bi-ṯalāṯ naġamāt āḫar*
asfal lower (in pitch) [→ *suflī*]
24v *yašīl al-asfal ilā al-a‘lā*
asqaṭ to omit
16v *yakūn isqāṭuk min al-dawr ṯamāniyat rāhāt taj‘aluhā zamanan*
aṭl primary constituent
25a *aṣl al-anġām al-naġma kamā ann aṭl al-ḍurūb al-rāh*
aṣl pl. *uṣūl* primary rhythmic cycle
5v *hiya aḥad ašar min al-ḍurūb uṣūl maqsūma min al-rāhāt*
7r *an taj‘al min al-rāhāt dawā’ir maḥṣūra taštamil ‘alā uṣūl wa-furū‘ wa-ġayrihā*
6b *kull dawrayn minhumā dawr ġayr rubā‘ī wa-huwa aṣl lahumā lah īqā‘ān fāṣilān baynah wa-bayn ġayrih*
basic form
17v *aṣl al-fāḫita ‘ašr rāhāt wa-tu‘īr lah min rāhayn*
12r *muḫammas ṭawīl* is defined as *aṣl li-aṣl al-fāḫita*
atā bi- to perform

22r *in utiya bi-far' min ḏālik*
32v–33r *ṯumm yu'tā bi-'l-'uššāq min dūkāh kānat rastan*
aṯṯar to cause
5v *li-kull ḥarf naqra fī al-awwal tu'aṯṯir īqā' ṣawt yusma'*
25b *madd ... yu'aṯṯir zamanan zā'idan li-l-ḥarf al-aḫīr*
āwāz one of a group of six modes
42r *innah āwāz bayn al-rast wa-'l-'irāq*
awqa' (lit. to let fall) to activate [→ *īqā'*]
7r *yūqa' ṣawtan ma'a naqra*
5v *li-kull ḥarf naqra fī al-awwal tu'aṯṯir īqā' ṣawt yusma'*
awwal beginning, onset
5v *li-kull ḥarf naqra fī al-awwal tu'aṯṯir īqā' ṣawt yusma'*
33v *awwal al-zīlakand āḫir hank al-'irāq fī al-ḥidda*
awwal īqā' → *īqā'*

bāb point of entry (in rhythmic cycle)
23r–v *bābuh allaḏī daḫal minh*
ba'd beginning a composition after the onset of the rhythmic cycle (fol. 23b)
baḥr pl. *biḥār* metre
1v *min durar al-ḥikam al-mustaḫraja min biḥār awzān ṣanā'i'ihā*
banjkāh a mode
a note a perfect fifth above a *rast* note
28v *kull dūkāh li-rast banjkāh li-rast huwa ṯānīh min al-līn*
basīṭ a form or category (defined on fol. 23v)
4v *kān yasma' al-ġinā' wa-yumayyiz bayn al-basīṭ wa-'l-našīd wa-'l-ḫafīf*
bayt 'home' note
30v *yaḥuṭṭ baytahā*
30v *al-rast al-ṯānī bayt al-jārkāh*
(pl. *buyūt*) note of a mode
42v *innah naġam šawāḏḏ min buyūt al-zīlakand*
bi-ġayr zaman without extra duration
26v *tasta'mil naġma min al-dūkāh allatī fawq al-ramal bi-ġayr zaman*
bīšrūh a sub-type of *basīṭ* that is not set within a rhythmic cycle, but has a rhythmic pulse (defined on fol. 23v)

dā'ira pl. *dawā'ir* (regular) cycle [→ *dawr*]
group of four modes perceived as forming a circle
39r *hiya dā'iratān ra's al-hank wa-'l-'irāq wa-'l-zankulā wa-'l-iṣbahān dā'ira wa-'l-māyāh wa-abū salīk wa-'l-nawā wa-'l-'uššāq dā'ira uḫrā*
dā'irat al-muḫammas al-qaṣīr fī al-āla instrumental version of *muḫammas qaṣīr* (fol. 20v)
dawā'ir maḥṣūra → *maḥṣūr*
daḫal to enter (into a rhythmic cycle) (v.n. *duḫūl*)
23r–v *bābuh allaḏī daḫal minh fa-yadḫul minh ayḍan*
23r *ta'tī bi-'l-'amal min makān al-duḫūl*
23r *duḫūluh min* [*awwal*] *rāh*
to be contained within
34b *daḫalat naġamāt al-zīlakand wa-ra's al-'irāq bayn rast ra's al-hank wa-bayn āḫir 'uluww al-iṣbahān*
dāḫil performing a composition in accordance with the original rhythmic cycle (fol. 22v)
falling within (appropriate pitch norms)
24r *al-faẓī' al-dāḫil awlā min al-ṣayyit al-ḫārij*
dawr pl. *adwār* cycle, rhythmic cycle [→ *dā'ira*]
6r *yusammā* [*al-ḍarb al-maqsūm*] *dawran li-takarrurih fī al-'amal*
6r *kull dawr lah far'ān fī zamanih*
8r *wa-hiya awwal īqā' awwal far' min al-dawr*
seemingly synonymous with *ḍarb* as distinctive structure
3r *al-wuqūf 'ind adwār al-ṣinā'a wa-ḥudūdihā wa-daqā'iqihā*
7r *iḏā aradt an taj'al ḍarban min zaman hāḏih al-rāḥāt wa-taj'alahā dawran li-tumayyizahā 'an al-dawr allaḏī yalīhā fa-taj'al ...*
duḫūl → *daḫal*

dūkāh a mode

one of a set of five pitches placed above the *ramal* pitches, each (presumably) a perfect fourth above or below the next *dūkāh*

25v *taštamil ʿalā tasmiyat sittat rusūt wa-ḫamsat armāl wa-ḫamsat dūkāh*

a note a whole tone above a *rast* note

28v *kull dūkāh li-rast banjkāh li-rast huwa ṯānīh min al-līn*

ḍabaṭ to fix, specify

26v *al-naġamāt al-ḍābiṭa li-mīzān al-qisma*

ḍabṭ fixing precisely, specifying

25v *li-ḍabṭ mawāzīn azminat al-ḍurūb*

25v–26r *tasmiyat … mā bayn al-rusūt ḍabṭan li-mīzān al-qisma*

ḍarb pl. *ḍurūb* rhythmic cycle

5r *al-muqaddima al-ūlā taštamil ʿalā ʿilm al-ḍurūb wa-ʾl-qisam wa-hiya aḥad ʿašar min al-ḍurūb uṣūl maqsūma min al-rāhāt*

25r *tanḥaṣir al-ṭabaqa bi-ʾl-naġamāt kamā ʾnḥaṣarat al-ḍurūb bi-ʾl-rāhāt*

rhythmic cycle with distinctive structure

25v *li-ḍabṭ mawāzīn azminat al-ḍurūb*

5v–6r *kull ḍarb maqsūm min al-rāhāt lah fawāṣil baynah wa-bayn ġayrih min al-ḍurūb*

seemingly synonymous with *dawr* as distinctive structure

7r *iḏā aradt an tajʿal ḍarban min zaman hāḏih al-rāhāt wa-tajʿalahā dawran li-tumayyizahā ʿan al-dawr allaḏī yalīhā fa-tajʿal …*

ḍarb maqsūm a standard cycle with a distinguishing pair of *fawāṣil*

5v–6r *kull ḍarb maqsūm min al-rāhāt lah fawāṣil baynah wa-bayn ġayrih min al-ḍurūb*

al-ḍarb al-muḫammas al-qaṣīr a rhythmic cycle, defined (fol. 14v) asa *nawʿ min al-ṯaqīl al-ṯānī*

al-ḍarb al-sittat ʿašarīyuʿīd al-muḫammas al-qaṣīr a rhythmic cycle, defined (fol. 13v) as a *nawʿ min al-ṯaqīl al-awwal*

farʿ (pl. *furūʿ*) division of cycle (into two parts)

6r *kull dawr lah farʿān fī zamanih*

7r *an tajʿal min al-rāhāt dawāʾir maḥṣūra taštamil ʿalā uṣūl wa-furūʿ wa-ġayrihā*

6v *al-farʿ al-awwal minh yataṣawwar fī al-zaman allaḏī qabl awwal īqāʿih wa-farʿuh al-ṯānī fī al-zaman allaḏī baʿd awwal īqāʿih*

(occasionally) one of a pair of cycles (*dawr*)

10r (of *ṯānī ṯaqīl*) *kull dawrayn minh farʿān li-awwal ṯaqīl*

a mode derived from two other modes

39v *sitta kull wāḥid farʿ min iṯnayn*

fāṣila pl. *fawāṣil* adistinctive attack (one of a pair deemed characteristic of a cycle)

5v–6r *kull ḍarb maqsūm min al-rāhāt lah fawāṣil baynah wa-bayn ġayrih min al-ḍurūb*

6r defined as *ṣawtān min naqaratayn min ḥarfayn fī zaman al-dawr al-šāmil li-l-farʿayn in kān rubāʿiyyan*

also applied to *farʿ*

6r *li-kull farʿ fawāṣil ayḍan*

positioning in each *farʿ*:

6r *farʿ* 1: first: *baʿd awwal rubʿ minh*, second: *ṣawt min naqra min awwal rāh huwa āḫir ṯānī rub minh*

6r–v *farʿ* 2: first: *baʿd ṯāliṯ rubʿ min al-dawr*, second: *ṣawt min naqra min awwal rāh huwa āḫir al-dawr al-maqsūm*

in relation to *ramal*:

26r *al-ramal fāṣila bayn al-anġām li-ʿadam istiʿmālihā maʿ istimāl mā taḥtahā min al-līn wa-mā fawqahā min al-ḥidda fī ġālib al-aṣwāt*

fawwat (v.n. *tafwīt*) to omit (time units)

23r *iḏā aʿād yufawwit zamanan min dawr bi-lā ʿamal*

23r *min ġayr tafwīt zaman bi-lā ʿamal*

ʿād to return (and repeat) [→ *aʿād*]

29r *taʿūd fa-taḫuḏ naġma min al-rast al-ṯāliṯ ṯāniyatan*

30r *ṯumm taʿūd ilā naġma dūkā tik al-awwala*

ʿalā to ascend [→ *ʿuluww, ʿulwī*]

30r *ṯumm taʿlū fa-taḫuḏ naġma min al-dūkāh al-awwala al-mubtadaʾ bihā*

31r *al-rast allaḏī ʿalawt ilayh*

to be above, higher

30v–31r *yaʿlū hāḏā al-ṣawt bi-mā fawqah min al-aṣwāt*
31v *naġma min rast wa-naġma min rast āḫar taʿlūh*

ʿālim a scholar, someome knowledgeable in music theory
5r *wa-raʾayt al-mūsīqī ʿind al-nās huwa al-ʿāmil lā al-ʿālim wa-lays al-amr ka-ḏālik*

ʿamal musical practice
4v *al-ʿilm huwa qāʿidat al-ʿamal wa-huwa ʿalayh yubnā*
5r *al-ʿamal bi-ġayr al-ʿilm innamā fāʿiluh ka-ʾl-muḥākī li-l-anġām wa-ʾl-mumāṯil*
action, process
16v *niṣf hāḏā al-ʿamal li-l-muḫammas al-qaṣīr*
a composition
46v *baʿd nihāyat al-ʿamal*
24r *ʿamal yanḥaṭir fī zaman ḍarb awlā min ʿamal lā yanḥaṣir fī zaman ḍarb*

ʿāmil a practitioner
5r *wa-raʾayt al-mūsīqī ʿind al-nās huwa al-ʿāmil lā al-ʿālim wa-lays al-amr ka-ḏālik*

ʿaraj to veer
12r explanation of name *ʿurayjāʾ*: *liʾannah ʿaraj ʿan al-ḫurāsānī ilā al-turkī*

ʿilm musical knowledge, theory
5r *al-ʿilm huwa qāʿidat al-ʿamal wa-huwa ʿalayh yubnā*
5r *al-ʿamal bi-ġayr al-ʿilm innamā fāʿiluh ka-ʾl-muḥākī li-l-anġām wa-ʾl-mumāṯil*
5r *al-ʿilm ḫārij ʿan il-ʿamal*

ʿuluww high, high register
35r *āḫir nihāyatih fī al-ʿuluww*
37v *inn abā salīk min ʿuluww ilā hubūṭ wa-ʾl-nawā min hubūṭ ilā ʿuluww*
above
31v *hāḏā al-ḥijāzī yaqaʿ ʿuluww al-zankulā*
the one above, a higher mode
30v *hāḏā al-hank wa-ʿuluwwuh*
ʿuluwwāt higher modes
33v *yaḥsun ayḍan bi-ʿuluwwāt min fawqih ilā āḫir al-ṭabaqa*

ʿ*ulwī* upper [→ *aʿlā*, *ʿuluww*]
31v *tajʿal rastak al-ʿulwī bayt jārkāh rastak al-suflī sākāh*

ʿurayjāʾ (fol. 12v)[→ *ʿaraj*]alternative name of → *ḥarbī*

ġannā to sing [→ *ġināʾ*]
4v *adraktu al-nās bi-ʾl-madīna yuġannūn laḥnan*

ġayr al-āla vocal performance (contrasted with *āla*, instrumental performance)
5v *fī ġayr al-āla taʾtī bi-ṣawt min īqāʿ naqra min ḥarf min awwalih wa-ʾl-naqra al-ṯāniya minh tajʿaluhā zamanan li-ʾstiqbāl al-rāh allaḏī yalīh*

ġayr rubāʿī (a cycle) not divisible into quarters
6r *wa-huwa mā lā yumkin qismat ḏālik* (sc. *qismat zamanih ilā arbaʿat arbāʿ*)
16v *aṣl ḍarb al-fāḫita wa-huwa ġayr rubāʿī*

ġināʾ song, singing [→ *ġannā*]
4v *kān yasmaʿ al-ġināʾ wa-yumayyiz bayn al-basīṭ wa-ʾl-našīd wa-ʾl-ḫafīf*

habaṭ (*bi*) to descend (by)
31v *ṯumm tahbiṭ min al-naġamāt ilā al-jārkāh*
34r *ṯumm tahbiṭ bi naġma min al-rast*
36v *naġma min al-rast al-ḫāmis min al-līn ṯumm tahbiṭ bi-naġma min al-sākāh allatī taḥt al-rast al-ḫāmis*
to lower
30v *iḏā aradta … an tahbiṭ bihā maḥaṭṭahā ʿalā sākāt rast taḥt rastihā fa-takūn ḫālaṭat al-iṣbahān wa-ḥaṭṭat ʿalā ḥijāzī*

hank pl. *hunūk* a member of a particular class/group of modes
24v *lā yusammā ʿind al-ʿajam hankan liʾann al-hank min šarṭih an yakūn rābiʿan li-arbaʿat aṣwāt muṭriba yašīl al-asfal ilā ʾl-aʿlā wa-yaḥuṭṭ al-aʿlā ʿalā al-asfal*
a note
33v *awwal al-zīlakand āḫir hank al-ʿirāq fī al-ḥidda*

hubūṭ → *habaṭ*, *āḫir*

ḥadd pl. *ḥudūd* division, segment

27r *hāḏā ḥadd jayyid maqsūm min al-ṭabaqa min rast ilā rast*

27r *min ḏālik ta‘rif/tu‘raf ḥudūd al-ṭabaqa*

ḥādd high in pitch

25v *awwaluhā layyin wa-āḫiruhā aḥadd naġma*

ḥarbī ‘military’: name of a *muḥarrak* variant shared by *ṯānī ṯaqīl, ḫurāsānī*, and *turkī*

ḥarf letter; unit of duration

5v *al-rāh zaman ḥarfayn*

in instrumental performance marked by an attack on each:

5v *li-kull ḥarf naqra fī al-awwal tu’aṯṯir īqā‘ ṭawt yusma‘*

in vocal not:

5v *lākinnah fī ġayr al-āla ta’tī bi-ṣawt min īqā‘ naqra min ḥarf min awwalih wa-’l-naqra al-ṯāniya minh taj‘aluhā zamanan li-’stiqbāl al-rāh allaḏī yalīh*

ḥasun to go well (with)

29a *yaḥsun ra’s al-hank bi-anġām tantuj min rusūt fawqah*

ḥaṣar to count[1] [→ *inḥaṣar*]

25v *qasamt al-ṭabaqa wa-ḥaṣartuhā fa-wajadtuhā tanḥaṣir fī iḥdā wa-‘išrīn naġma*

ḥaṭṭ to descend [→*maḥaṭṭ*]

24v *yaḥuṭṭ al-a‘lā ‘alā al-asfal*

39r *taḥuṭṭ ‘alā al-līn*

30r *ṯumm taḥuṭṭ bi-naġma min ramal taḥt al-dūkāh*

to lower

30v *matā ḥaṭṭaytahumā ‘alā rast šālat minh*

ḥidda high pitch [→ *ḥādd*]

28v *bi-mā fīh min al-ḥidda wa-’l-ṯiqal*

ḥukm al-dā’ira (fol. 20v) the norms associated with instrumental realization (contrasted in fol. 21r with)

ḥukm al-rāh the norms associated with vocal realization

ḫafīf a song form or category, defined on fol. 24r.

4v *kān yasma‘ al-ġinā’ wa-yumayyiz bayn al-basīṭ wa-’l-našīd wa-’l-ḫafīf*

ḫālaf to be contrary to [→ *muḫālafa, muḫālif*]

6v *yuḫālif al-uṣūl bi-annah lā yutaṣawwar ba‘d awwal īqā‘ al-dawr wujūd far‘ ṯān li-l-dawr*

ḫālaṭ to mix

30v *tuḫāliṭuhā bi-iṣbahān*

ḫaraj to leave (a rhythmic cycle for another)

22v *taḫruj min ḍarb aṣl ilā ḍarb aṣl āḫar*

30v *iḏā aradta … an tahbiṭ bihā maḥaṭṭahā ‘alā sākāt rast taḥt rastihā fa-takūn ḫālaṭat al-iṣbahān wa-ḥaṭṭat ‘alā ḥijāzī*

ḫārij performance that deviates from rhythmic structure of original (fol. 22b)

falling outside (appropriate pitch norms)

24r *al-faẓī‘ al-dāḫil awlā min al-ṣayyit al-ḫārij wa-yusammūnah al-‘ajam nāsāz*

ḫārij-dāḫil performance that switches from one cycle to another (fols 22v–23r)

ibtada’ to begin

30r *naġma min al-dūkāh al-mubtada’ bihā*

37r *tabtadi’ bih ba‘d maḥaṭṭ abīsalīk*

indaraj to be assimilated, incorporated

25r–v *al-naġma tandarij ḥurūfuhā wa-taqill azminatuhā wa-tuzād ma‘ baqā’ isti‘māl maddātihā fī al-‘amal*

infaṭal to end

23r *ta’tī bi-’l-‘amal min ba‘ḍ al-dawr wa-tanfaṭil ‘alā īqā‘ dawr āḫar*

infiṭāl ending

23r *duḫūluh min [awwal] rāh wa-’nfiṭāluh ‘alā rāh takmilat al-dawr*

inḥaṭar to consist of, be delimited by[2] [→ *ḥaṣar*]

24r *‘amal yanḥaṣir fī zaman ḍarb awlā min amal lā yanḥaṣir fī zaman ḍarb*

25r *tanḥaṣir al-ṭabaqa bi-’l-naġamāt kamā ’nḥaṣarat al-ḍurūb bi-’l-rāhāt*

inqalab to be transformed into

31b *iḥtariz an tanqalib al-jārkāh zankulā*

inqasam to be divided off [→ *qism*]
in relation to duration:
7r *ab‘ad mā yanqasim min al-rāḥāt al-ṯaqīl al-awwal*
in relation to pitch:
25r *yanqasim minhā* (i.e. *al-ṭabaqa*) *mā ya’tī ḏikr kull wāḥid*
26v *al-ṣaḥīḥ ann al-ṭabaqa yanqasim minhā sāz wāḥid*
27r *tanqasim minhā* (i.e. *al-naġamāt*) *al-aṣwāt*

intiqāl shift, transition
28b *kull naġma bi-ḏātihā yumkin an takūn rastan wa-tatamayyaz bi-’ntiqālihā ilā ġayrihā*

īqā‘ (the science of) rhythm [→ *awqa‘*]
46v *lam aḏkur al-īqā‘ li-* [*‘adam*] *ḍarūratī ilay fī ‘ilm al-naġam*
impact, cause of the onset of sound
5v *tu’aṯṯir īqā‘ ṣawt yusma‘*
awwal īqā‘ the first of the two distinctive attacks of a cycle
7r *yūqa‘ ṣawtan ma‘ naqra min awwalih wa-hiya ḫāmis wa-ṯalāṯūn naqra min al-dawr fa-hāḏā awwal īqā‘ hāḏā al-dawr*
6r *awwal īqā‘ kull dawr rubā‘ī ṭawt ma‘ naqra min awwal rāh huwa āḫir ṯāliṯ rub‘ minh*
ṯānī īqā‘ the second of the two distinctive attacks of a cycle
6r *ṯānī īqā‘ al-dawr ṭawt ma‘ naqra min awwal rāh huwa āḫir al-dawr al-maqsūm*

irtafa‘ to rise, ascend
27r *ṯumm tartafi‘ fa-ta’ḫuḏ naġma min al-rast al-ṯānī*
34v *irtafa‘ ilā āḫir al-‘irāq*
to rise up from = be removed from
40r *yaḥuṭṭ al-zīlakand ‘alayh iḏā irtafa‘ al-ḥijāzī ‘anh*

ista‘mal to use
30v–31r *yusammā al-nikārī iḏā ’stamalt naġma min al-ramal fawq al-rast al-ṯāliṯ ba‘d isti‘mālik naġmatan min al-rast al-ṯāliṯ*
32r *bayn al-rastayn naġmatān tusta‘malān fī al-zankulā wa-lā tusta‘malān fī al-jārkāh*
33r *ṯumm tasta‘mil naġmat al-sākāh allatī ista‘maltahā*
min ġayr isti‘māl without using, i.e. omitting
38r *tahbiṭ bi-naġamāt min abīsalīk min ġayr isti‘māl sākāh wa-lā ramal yaqa‘ ‘uluww al-rahāwī*

istaqall to be independent [→ *mustaqill*]
40v–41r *hāḏā yadull ‘alā ann kullan minhum ṭawt yastaqill bi-ḏātih*

istarāḥ to be at ease, feel confortable
24a *man ‘araf ṭabaqatah istarāḥ*

istarsal to continue, repeat [→ *mustarsil*]
16r *iḏā ’starsalt fa-’f‘al kaḏālik naqra min awwal rāh bi-’l-fatḥ wa-naqra min awwal rāh ba‘dah bi-’l-kasr*

istibdā’ a sub-type of *basīṭ* that is set within a rhythmic cycle (defined on fol. 23v)

istinbāṭ derivation, extraction[3]
39v *yanbaġī an yakūn ra’s al-hank nataj ba‘dah min al-ṭabaqa ‘ind istinbāṭ al-aṣwāt minhā*

iṣṭilāḥ technical term, usage [→ *muṣṭalaḥ*]
24b *fī ’ṣṭilāḥ man taqaddam min al-salaf*

ištamal (*‘alā*) to contain
37v *huwa yaštamil ‘alā tis‘ naġamāt*

ištaqq to derive
29r *taštaqq minh hankan muṭriban*

ja‘al to make (one note have the transpositional value of another)
35b *taj‘al al-sākāh allatī fawq hāḏih dūkāh ramalan*

jāriya pl. *jawārī* female slave singer/musician
3v *yaṣūġ al-alḥān li-jawārīh wa-yasma‘uhā minhunn ‘alā awtār*

jārkāh a mode
a note a perfect fourth above a *rast* note
28v *kull rast jārkāh li-rast huwa ṯānīh min al-līn*

jawāb ‘response’
a *rast* note that is a perfect fourth from another
28v *kull rast jawāb li-rast*
a *rast* note that is a minor seventh from another

38v (*al-rast al-sādis … al-rast al-ṯānī min al-līn* =) *jawāb jawābih*
jāwara to be next to, adjacent
34r *min ġayr hubūṭ ilā naġma tujāwiruhā min al-līn*

kāmil complete, perfect
35r *al-maḥaṭṭ al-kāmil an yaḥuṭṭ ʿalā rast*
full, complete (as opposed to half)
38r *huwa sabʿ naġamāt sitta kāmila wa-niṣf*
kāmil al-ʿamal performing a composition throughout the cycle without interruption
23v *taʾtī bi-ʾl-dawr kāmil al-ʿamal wa-tanfaṣil ʿalā īqāʿ min ġayr tafwīt zaman bi-lā ʿamal*
kāmin concealed
40r *huwa ṣawt kāmin taḥt al-ḥijāzī*
kamul to be/become complete
16b *yakmul al-dawr sittat ʿašar rāhan*
21v *farʿ yakmul bi-īqāʿ min naqra min awwal dāʾira talīhā*
karrar to repeat [→ *mukarrar*]
33r *ṯumm tukarrir ḏālik ṯāniyan*
lābiṯ sustained
28v *al-rast huwa al-ṣawt al-lābiṯ*
laḥḥan to set to music
24r *al-ḫafīf šiʿr mulaḥḥan*
23v *al-našīd šiʿr mulaḥḥan bi-ġayr zaman ḍarb maqsūm*
laḥn pl. *alḥān* melody
3v *yaṣūġ al-alḥān li-jawārīh wa-yasmaʿuhā minhunn ʿalā awtār*
4v *adraktu al-nās bi-ʾl-madīna yuġannūn laḥnan*
layyin low in pitch
25v *awwaluhā layyin wa-āḫiruhā aḥadd naġma*
līn low pitch
25r *min āḫir al-līn ilā nihāyat al-ḥidda*

mabdaʾ beginning [→ *ibtadaʾ*]
38v *mabdaʾuh min rast qudratuh dūkāh wa-ṭarafāh dūkatān qudratuhumā rastān*
39r *al-ʿuššāq mabdaʾuh min dūkāh bayn rastayn*
madd to extend
25r *bi-ġayr madd bi-āḫir al-ḥarfayn*
madda extension of long vowel
25r–v *al-naġma tandarij ḥurūfuhā wa-taqill azminatuhā wa-tuzād maʿ baqāʾ istiʿmāl maddātihā fī al-ʿamal*
maddād prolonged
28v *al-rast huwa al-ṣawt al-lābiṯ al-maddād*
maʿ beginning a composition on the first time unit of the cycle (fol. 23b)
maʿ al-īqāʿ in a rhythmic cycle (as against in free rhythm)
maʿkūs (also *munʿakis*) *fī waḍʿih* reversed in its position (with reference to the position of the initial and final notes)
30r *yaḥsun al-dūkāh bi- … abī salīk maʿkūs fī waḍʿih*
44v *yakūn hāḏā al-naġam maʿkūsan fī waḍʿih*
maḥall (proper/normal) position
35v *huwa sākāh murtafiʿa ʿan maḥallihā*
maḥaṭṭ finalis [→ *ḥaṭṭ*]
29v *maḥaṭṭ raʾs al-hank*
35r *al-iṣbahān maḥaṭṭāt*
35r *al-maḥaṭṭ al-kāmil an yaḥuṭṭ ʿalā rast*
maḥṣūr limited, counted (i.e. with a specific number of attacks giving a regular structure) [→ *ḥaṣar*]
7r *an tajʿal min al-rāhāt dawāʾir maḥṣūra taštamil ʿalā uṣūl wa-furūʿ wa-ġayrihā*
mamdūd extended [→ *madd*]
28b *bi-ḥarf mamdūd bi qadrihimā* (i.e. *ḥarfayn*)
maqlūb to perform in a rhythmic cycle in which the two distinctive attacks are displaced (fol. 23r)
maqsūm min divided from (among), i.e. made up of
5v *hiya aḥad ašar min al-ḍurūb uṣūl maqsūma min al-rāhāt*

5v–6r *kull ḍarb maqsūm min al-rāhāt lah fawāṣil baynah wa-bayn ġayrih min al-ḍurūb*

marākiz → *markaz*

marātib classes (of rhythmic types, i.e. cycles)

4r *kān yuqīm al-aṣwāt ilā al-ṯaqīl al-awwal wa-ilā al-ṯaqīl al-ṯānī wa-mā ba‘dahā min al-marātib*

markaz pl. *marākiz* (correct) position

22v *ta’tī bi-īqā‘ ḏālik al-ḍarb fī marākizih*

23r *ta’tī bi-’l-fawāṣil fī ġayr marākizihā*

māšī a particular rhythmic variant

mawḍi‘ position

21v *mawḍi‘ al-īqā‘ ‘alā ḥukm al-rāh wa-huwa al-rāh al-ṯānī min*

mayyaz to distinguish (between categories)

4v *kān yasma‘ al-ġinā’ wa-yumayyiz bayn al-basīṭ wa-’l-našīd wa-’l-ḫafīf*

frequently in the formula (e.g. fol. 10r):

iḏā aradt an taj‘al li-hāḏā al-dawr īqā‘ayn fāṭilayn li-tumayyizah ‘an al-dawr allaḏī yalīh

mīzān pl. *mawāzīn* measure

23r *al-ḍarb allaḏī ṭunnif al-‘amal fī mīzān zamanih*

25v *li-ḍabṭ mawāzīn azminat al-ḍurūb*

mu‘āwana help, cooperation

24r *al-mu‘āwana mulāḥaqa lā musābaqa*

mubtakar innovated, original

22v *lā yumkin an ta’tiya bi-far‘ayn mubtakarayn*

muḫākī imitator

5r *al-‘amal bi-ġayr al-‘ilm innamā fā‘iluh ka-’l-muḫākī li-l-anġām wa-’l-mumāṯil*

muḫarrak (or *muḫarrik*) a particular rhythmic variant

muḫālafa contrast

21v *ḫaṣalat al-muḫālafa bayn al-dawr wa-bayn al-dā’ira fī ru’ūs al-arbā‘*

muḫālif contrary, different to

20v *lākinnahā muḫālifa li-dā’irat niṣf al-yu‘īd*

muḫtaṣar an abbreviated form

20r *huwa muḫtaṣar min al-muḫammas nāqiṣ ‘anh bi-rāh*

mukarrar repeated

38r *huwa sab‘ naġamāt sitta kāmila wa-niṣf* [*naġma*] *mukarrara*

mulāḥaqa catching up, being together (in an ensemble)

24a *al-mu‘āwana mulāḥaqa lā musābaqa*

mulā’ama consonance, concordance

40r *mulā’amat hā’ulā’ min al-ṭabaqa aḥsan mulā’ama min al-dā’iratayn al-muqaddam ḏikruhā*

mulā’im consonant, concordant

24v *yaštamil ‘alā naġamāt mulā’ima*

mulaḥḥan set to music [→ *laḥḥan, laḥn*]

ši‘r mulaḥḥan

mumāṯil[4] resembling

5r *al-‘amal bi-ġayr al-‘ilm innamā fā‘iluh ka-’l-muḫākī li-l-anġām wa-’l-mumāṯil*

mun‘akis → *ma‘kūs*

muntahā furthest extent [→ *nihāya*]

40r *muntahāh fī al-ḥidda ilā sākāh fawq dūkāh*

muqaddar given the value (*qudra*) of, i.e. transposed to

31r *yakūn al-ḥijāzī hā hunā muqaddaran min rast ilā rast a‘lā minh rastān qudratuhumā sākātān*

34v *hiya sākāt rast muqaddara min a‘lā naġamāt al-zīlakand min al-ramal*

35v *ta’ḫuḏ naġma min al-rast al-muqaddar*

murakkab combined

(rhythmic) combination

22r *mā ‘adā ḏālik min al-murakkabāt fa-kaṯīr*

22r *lā yu‘tadd bi-’l-murakkab aṣlan li-annah ba‘ḍ aṣl tarakkab ‘alayh ba‘ḍ aṣl āḫar*

(modal) combination

32v *ammā al-haftkāh fa-ṣawt murakkab ‘uššāq ‘alā banjkāh*

42r *innah āwāz bayn al-rast wa-’l-‘irāq fa-innah naġam murakkab*

murtafi‘ raised

35v *huwa sākāh murtafiʿa ʿan maḥallihā*

musābaqa competing, trying to outstrip

24r *al-muʿāwana mulāḥaqa lā musābaqa*

mūsīqā the theory of music

2v *maʿrifat juzʾ min al-mūsīqā*

mūsīqā (written with final *alif*) music (al practice)

6v–7v *al-mūsīqā tanqasim ilā qismayn ḍurūb wa-anġām*

mūsīqī musician

mūsīqāriyyūn ?performing musicians

26r–v *hāḏā māqālah al-mūsīqāriyyūn*

mustaʿmal used previously [→ *istaʿmal*]

37v–38r *tāratan taʾtī bi-hāḏih al-naġamāt wa-tazīd ʿalayhā naġma min sākāh al-mustaʿmala*

mustaqill independent [→ *istaqall*]

37v *hāḏā naġam mustaqill*

41r *hāḏā yadull ʿalā ann kullan minhumā ṣawt mustaqill bi-ḏātih*

mustarsil continuous [→ *istarsal*]

5v *wa-ṣifatuh tan tan tan hākaḏā mustarsilan*

23v *yaḥṣuruh zaman al-rāhāt al-mustarsila*

muṣannaf composition [→ *ṣannaf*]

22r *fīh muṣannafāt*

muṣṭaḥab accompanied

23r *lā yuʿtadd bih muṣṭalaḥan wa-in kān muṣṭaḥab al-wazn muṣṭaḥab al-īqāʿāt*

muṣṭalaḥ technical term

22r *hāḏā muṣṭalaḥ min jumlat al-muṣṭalaḥāt wa-lays bi-aṣl*

a particular style of rhythmic performance (fol. 22v)

23r *lā yuʿtadd bih muṣṭalaḥan wa-in kān muṣṭaḥab al-wazn muṣṭaḥab ah-īqāʿāt*

muštaqq derived

37r *huwa muštaqq min al-buʿd li-ṭūlih*

mutamakkin well-established, lasting

39v *naġma min rast bi-zaman mutamakkin*

mutawālī consecutive

18b *ṣawtayn min naqratayn min ḥarfayn mutawāliyayn*

muṭābaqa correspondence

20v *man lam yaʿlam ḥukm al-rāh wa-muṭābaqat al-dāʾira fī al-āla al-rāh wa-illā taʿib wa-atʿab*

muṭrib that which gives pleasure; *muṭriba* a singing-girl [→ *ṭarab*]

1r *wa-jāmiʿ al-qulūb ʿalā muṭribāt al-maḥāsin wa-maḥāsin muṭribātihā*

24r *ʿamal yanḥaṣir fī zaman ḍarb awlā min amal lā yanḥaṣir fī zaman ḍarb wa-in kān muṭriban*

29r *awwal arbaʿat anġām muṭriba*

muwālāh continuing, following successively

25r *lā budd min al-muwālāh min al-naġamāt*

muwallad derived mode

37r *hāḏā naġam abīsalīk bi-muwalladātih min āḫir maḥaṭṭih*

40v *yaḥsun … bi-naġam yuʿraf bi-ʾl-muwallad min fawqih wa-yaḥsun al-muwallad bih min taḥtih*

naġam pl. *anġām* mode

24v *al-muqaddima al-ṯāniya allatī taštamil ʿalā ʿilm al-anġām wa-ʾl-anġām jamʿ naġam wa-ʾl-naġām huwa al-ṣawt al-kāmil al-mutaḥarrik … yaštamil ʿalā naġamāt mulāʾima*

naġma pl. *naġamāt* note

25r *al-naġamāt jamʿ naġma*

24v *yaštamil ʿalā naġamāt mulāʾima*

25r *mā ʾštamalat ʿalayh al-ṭabaqa min al-naġamāt*

28v *kull naġma bi-ḏātihā yumkin an takūn rastan wa-tatamayyaz bi-ʾntiqālihā ilā ġayrihā*

the duration thereof

25r *al-naġma hiya al-nuṭq bi-zaman ḥarfayn aw mā ḥākā ḏālik*

naqal to transfer (from one cycle to another)

22v *šayʾ ṣunnif fī ḍarb ṯānī ṯaqīl tanquluh ilā al-ḫurāsānī*

naqaṣ to lack

40v *naqaṣ ʿan maḥaṭṭih*
naqaṣ / *naqqaṣ* / *anqaṣ* to reduce, diminish
46v *tanquṣ min naġamāt abīsalīk naġamatayn min āḫirih*
nāqiṣ incomplete, lacking certain notes
35v *nāqiṣ min šayl*
35v *iṣbahān nāqiṣ ʿan maḥaṭṭih bi-naġmatayn*
43r *takūn al-jārkāh hāhunā nāqiṣa ʿan šaylihā bi-naġma*
naqra an attack, normally sounded
5v *li-kull ḥarf naqra fī al-awwal tuʾaṯṯir īqāʿ ṣawt yusmaʿ*
but not necessarily
5v *fī ġayr al-āla taʾtī bi-ṣawt min īqāʿ naqra min ḥarf min awwalih wa-ʾl-naqra al-ṯāniya minh tajʿaluhā zamanan li-ʾstiqbāl al-rāh allaḏī yalīh*
nāsāz discordant
24r *al-faẓīʿ al-dāḫil awlā min al-ṣayyit al-ḫārij wa-yusammūnah al-ʿajam nāsāz*
našīd a form or category (defined on fols 23v–24r)
5r *wa-minhum man yumayyiz bayn al-basīṭ wa-ʾl-našīd wa-ʾl-ḫafīf*
nataj to result, begin, proceed
29r *yaḥsun raʾs al-hank bi-anġām tantuj min rusūt fawqah*
33v *yaḥuṭṭ ʿalā abīsalīk nataja min dūkāh al-rast al-ṯāliṯ*
nawʿ pl. *anwāʿ* kind, sort, category
3r *taqassum anwāʿ al-ḍurūb wa-ʾl-anġām*
nihāyat al-ḥidda highest pitch
25r *min āḫir al-līn ilā nihāyat al-ḥidda*
nihāyat al-hubūṭ lowest pitch
25v–26r *min nihāyat hubūṭih ilā nihāyat ʿuluwwih*
nihāyat al-ʿuluww highest pitch
25r *wa-* [*huwa*] *min āḫir al-hubūṭ ilā nihāyat al-ʿuluww*
34v *allaḏī huwa nihāyat ʿuluww al-zīlakand*
niṣf naġma a half note positioned below one of the main notes
34r *niṣf naġma bi-maʿnā al-ʿudūl ʿan ḥiddat naġma min ġayr hubūṭ ilā naġma tujāwiruhā min al-līn*
44r *tuqaddiruhā sākāh wa-tastaʿmil niṣfahā*
nuṭq utterance (considered in terms of duration)
25r *al-naġma hiya al-nuṭq bi-zaman ḥarfayn*
28v [*al-rast*] *huwa al-nuṭq bi-zaman ḥarfayn wa-mā zād ʿalayhimā aw bi-ḥarf mamdūd bi-qadrihimā aw mā zād ʿalayhimā*
qabl beginning a composition before the first time unit of the rhythmic cycle (fol. 23b)
qaddar to give the transposed value of
35v *yuqaddar al-ramal rastan*
38v *tuqaddir awwal dūkāh min al-līn rastan*
qadr value (in transpositions) [→*qudra*]
32v *bi-qadr al-banjkāh sākāh*
35v *naġma min al-dūkāh allatī hiya aṣl āḫir ʿuluww al-iṣbahān bi-qadrihā rastan*
qasam to divide [→*qism*]
25v *qasamt al-ṭabaqa wa-ḥaṣartuhā fa-wajadtuhā tanḥaṣir fī iḥdā wa-ʿišrīn naġma*
qawiya ʿalā to be more powerful than, superior to
29v *yaqwā ʿalayhā raʾs al-hank*
qism dividing, forming a section
25r *al-ṭabaqa hiya mā yuḥtāj ilayh fī al-qism min al-naġamāt*
(sub)division
22b *al-ḫārij al-dāḫil ʿalā qismayn*
qisma pl. *qisam* division
5v *al-muqaddima al-ūlā taštamil ʿalā ʿilm al-ḍurūb wa-ʾl-qisam*
of pitch gamut
25v–26r *tasmiyat … mā bayn al-rusūt ḍabṭan li-mīzān al-qisma wa-taʿrīfan li-kayfiyyat al-ṣawt min nihāyat hubūṭih ilā nihāyat ʿuluwwih*
26r *ʿind qismat ḥudūd al-ṭabaqa*
qudra (transposed) value

31r *yakūn al-ḥijāzī hunā muqaddaran min rast ilā rast aʿlā minh rastān qudratuhumā sākātān*
32v *yakūn al-ḥijāzī hunā min dūkātayn qudratuhumā sākātān*
quwwa power
29v *yaqwā ʿalayhā raʾs al-hank fa-lā taẓhar li-l-zankulā quwwa*

raʾs pl. *ruʾūs* first time unit
21r *raʾs al-rubʿ al-awwal minhā al-tāʾ al-awwala min ḥurūf al-dāʾira*
raʾs al-hank a specific mode
43r *yaḥuṭṭ ʿalā rast raʾs al-hank*
rafaʿ to rise
39r *tarfaʿ ilā al-ḥidda*
rāh pl. *rāhāt* unit of duration
7r *an tajʿal min al-rāhāt dawāʾir maḥṣūra*
25r *tanḥaṣir al-ṭabaqa bi-ʾl-naġamāt kamā ʾnḥaṣarat al-ḍurūb bi-ʾl-rāhāt*
equivalent to two *ḥarf*
5v *al-rāhāt jamʿ rāh wa-ʾl-rāh zaman ḥarfayn*
in instrumental performance marked by an attack on each:
5v *li-kull ḥarf naqra fī al-awwal tuʾaṯṯir īqāʿ ṣawt yusmaʿ*
in vocal not:
5v *lākinnah fī ġayr al-āla taʾtī bi-ṣawt min īqāʿ naqra min ḥarf min awwalih wa-ʾl-naqra al-ṯāniya minh tajʿaluhā zamanan li-ʾstiqbāl al-rāh allaḏī yalīh*
rajaʿ to return
34r *min dūkāh tašraʿ wa-ilayhā tarjiʿ*
rakkab to combine [→ *murakkab*]
42v *iḏā rakkabt hāḏā al-tarkīb ʿalā miṯlih*
42v *tāratan turakkib hāḏā al-naġam ʿalā miṯlih*
ramal pl. *armāl* one of a set of five pitches placed above the *rast* pitches, each (presumably) a perfect fourth above or below the next *ramal*
25v *taštamil ʿalā tasmiyat sittat rusūt wa-ḫamsat armāl*
rast a sustained pitch
28v *al-rast huwa al-ṣawt al-lābiṯ al-maddād bi-mā fīh min al-ḥidda wa-ʾl-ṯiqal*
rast pl. *rusūt* one of a set of six pitches, each (presumably) a perfect fourth above or below the next *rast*
25v *taštamil ʿalā tasmiyat sittat rusūt*
and viewed as the major points of division/transition
25v *al-rusūt ḥudūd yuḍbaṭ bihā al-ṭabaqa wa-ʾl-qism*
26r *ʿind qismat ḥudūd al-ṭabaqa fa-ʾl-rast al-awwal wa-huwa awwal naġma min al-ṭabaqa …*
the first *rast* is the lowest pitch
26v *naġmat al-rast al-awwal wa-hiya naġma min āḫir al-ṭabaqa min al-līn*
a mode name
38v *arādū bi-ʾl-rast raʾs al-hank*
42r *innahā wāz bayn al-rast wa-ʾl-ʿirāq*
riyāḍī mathematical
3v *hāḏā al-ʿilm (yaʿnī ʿilm al-mūsīqā) ʿilm riyāḍī*
rubʿ pl. *arbāʿ* quarter
occasionally unequal: of *ṯānī ṯaqīl* : (10r) *al-rubʿ al-awwal minh zaman ḫamsa ḥurūf bi-rāhayn wa-niṣf … wa-ʾl-rubʿ al-ṯānī minh zaman ṯalāṯat rāhāt bi-sittat ḥurūf*
rubāʿī divisible into (not necessarily equal) quarters
6r *wa-huwa mā yumkin qismat zamanih ilā arbaʿat arbāʿ*

sāḏij a sub-type of *ḫafīf* in which there is no contrastive setting of the first hemistich of the second verse (fol. 24r)
sākāh one of a set of five pitches placed above the *dūkāh* pitches, each (presumably) a perfect fourth above or below the next *sākāh*
25v *taštamil ʿalā tasmiyat sittat rusūt wa-ḫamsat armāl wa-ḫamsat dūkāh wa-ḫamsat sākāh bayn al-rusūt*
a note a (presumably neutral) third above a rast note
28v *kull sākāh li-rast šaškāh li-rast huwa ṯānīh min al-līn*
a specific mode
samʿ pl. *asmāʿ* hearing
1r *mušannif al-asmāʿ bi-laṭāʾif maʿānī al-aqwāl*
samāʿ listening to music (usually from a Sufi perspective)
3v cited only in the title *al-imtāʿ fī aḥkām al-samāʿ*

sami‘ to listen to music
4v *kān yasma‘ al-ġinā’ wa-yumayyiz bayn al-basīṭ wa-’l-našīd wa-’l-ḫafīf*
yusma‘ audible
5v *li-kull ḥarf naqra fī al-awwal tu’aṯṯir īqā‘ ṣawt yusma‘*
sāz a span of two heptachords
25v *tanqasim min al-ṭabaqa sāzān*
26r *al-rast al-awwal ...wa-’l-rast al-ṯāliṯ ... wa-’l-rast al-ḫāmis ... sāz wāḥid ... wa-’l-rast al-ṯānī ... wa-’l-rast al-rābi‘ ... wa-’l-rast al-sādis ... sāz wāḥid*
a span of an octave
26v *al-ṣaḥīḥ ann al-ṭabaqa yanqasim minhā sāz wāḥid wa-huwa awwal naġma min al-līn wa-ḥādiya ‘ašar naġma min al-līn*
suflī low in pitch
31r *al-rast al-suflī allaḏī bada’t minh*
31v *taj‘al rastak al-‘ulwī bayt jārkāh rastak al-suflī sākāh*

ṣāġ to compose
3v *yaṣūġ al-alḥān li-jawārīh*
5r *wa-minhum man yaṣūġ al-alḥān*
ṣaḥīḥ al-‘amal lā ṣaḥīḥ al-dawr to perform a composition in part of one cycle and then switch to another (fol. 23r–v)
ṣaḥīḥ al-dawr to begin a composition on the first *rāh* of a cycle and to end it on the final one (fol. 23v)
ṣaḥīḥ al-dawr ṣaḥīḥ al-‘amal to maintain the composition throught the cycle without any interruption (fol. 23v)
ṣaḥīḥ al-mīzān properly formed
20v *hiya dā’ira ṣaḥīḥat al-mīzān sittat ‘ašar naqratan min sittat ‘ašar ḥarfan*
ṣanī‘a pl. *ṣanā’i‘* composition, artifice
1v *min durar al-ḥikam al-mustaḫraja min biḥār awzān ṣanā’i‘ihā*
ṣannaf to compose
23r *al-ḍarb allaḏī ṣunnif al-‘amal fī mīzān zamanih*
ṣawt pl. *aṣwāt* sound
5v *li-kull ḥarf naqra fī al-awwal tu’aṯṯir īqā‘ ṣawt yusma‘*
sustained tone
28v *summiya* (*al-rast*) *bi-’l-ṣawt al-maddād*
sound, melody
1v *al-ḥamd li-llāh sāmi‘ al-aṣwāt ‘alā ’ḫtilāf naġamātihā*
melody
24v *al-ṣawt al-kāmil al-mutaḥarrik ... wa-kull ṣawt yaštamil ‘alā naġamāt maḫṣūṣa ‘alā ṣifa maḫṣūṣa yaḥṣul minhā al-ṭarab*
a particular class/group of modes
29v *ṣawt al-dūkāh wa-huwa naġamatān*
ṣawwar to give form to [→ *taṣawwar*]
29r *iḏā aradt an tuṣawwir ra’s al-hank min rast*
30v *lā yanbaġī an yuṣawwar abū salīk illā min dūkāt al-rast al-ṯāliṯ min al-līn*
to give a transpositional value to
32v *an yuṣawwar rastan dūkāh*
32v *yuṣawwar al-ramal allaḏī fawq al-rast al-muṣawwar dūkāh sākāh*
ṣifa description/definition of a rhythmic cycle in terms of mnemonic syllables such as *tan, tanan*

šāl to ascend (v.n. *šayl*)
24v *yašīl al-asfal ilā al-a‘lā*
29v *šālat minh wa-ḥaṭṭat ‘alayh*
36v *yašīl bi-naġma ilā al-dūkāh*
to begin
33r *šayl ra’s al-hank*
35b *nāqiṣ min šayl*
36v *al-dūkāh allatī hiya awwal šayl al-māyāh*
šanbar a particular rhythmic variant
šannaf to sharpen, make keener
1r *mušannif al-asmā‘ bi-laṭā’if ma‘ānī al-aqwāl*
šara‘ to begin, set out
34r *min dūkāh tašra‘ wa-ilayhā tarji‘*

šaškāh a mode
a note a (presumably neutral) sixth above a *rast* note
28v *kull sākāh li-rast šaškāh li-rast huwa ṯānīh min al-līn*
šawāḏḏ pl. *šawāḏḏāt* a class of derived ('deviant') modes
46v *ammā al-šawāḏḏāt wa-'l-murakkabāt fa-kaṯīr*
šawāḏḏī deviant, derived
42v *innah naġam šawāḏḏī min buyūt al-zīlakand*
tā' the letter *t* used to symbolize a time unit
tafwīt → *fawwat*
taḥdīd definition, specification
24v–25r *lā budd min taḥdīd ṭabaqa yu'lam ṭarafāhā wa-wasaṭuhā wa-mā 'štamalat 'alayh al-ṭabaqa min al-naġamāt*
taḫallal to interrupt, come in between
23b *'amal min ġayr ši'r yataḫallaluh*
takarrar to be repeated, iterated
6r *yusammā* [*al-ḍarb al-maqsūm*] *dawran li-takarrurih fī al-'amal*
takmila completion
10r *hāḏā takmilat al-niṣf al-awwal min al-dawr*
(most frequently the final time unit of a cycle before the onset of the next)
7v *al-ṯāmina wa-'l-arba'ūn naqra takmilat arba'a wa-'išrīn rāhan zaman li-'stiqbāl dawr āḫar*
23r *rāh takmilat 'adad al-dawr*
tamayyaz (*min*) to be distinguished (by)
29v *yatamayyaz hāḏā al-ṣawt min al-ramal allaḏī taḥt al-dūkāh*
taqassam to be divided, distributed
3r *kašaft mā qālah 'ulamā' hāḏā al-fann min taqassum anwā' al-ḍurūb wa-'l-anġām*
tarakkab to be combined
42v *tāratan tarakkab hāḏā al-naġam 'alā miṯlih*
tarkīb combination
41r *tarkīb naġamāt al-ḥusaynī: awwaluh naġma min rast wa-naġma min dūkāh fawqah ...*
42r *ṣūrat hāḏā al-tarkīb an ...*
taṣawwar to imagine
42v *lā yutaṣawwar an yakūn āwāzan*
to take form
6v *yuwāfiq al-uṣūl li'ann zamanah yutaṣawwar minh far'ān wa-humā dawrā fāḫita wa-yuḫālif al-uṣūl bi-annah lā yutaṣawwar ba'd awwal īqā' al-dawr wujūd far' ṯān lil-l-dawr*
6v first *far'* of a cycle: *yataṣawwar fī al-zaman allaḏi qabl awwal īqā'ih*
28v *kull rast yataṣawwar minh ilā rast huwa ṯānīh min al-ḥidda naġam yusammā bi-'l-zankulā wa-yataṣawwar min 'aksih naġam yusammā ra's al-hank*
tatimma completion
17r *al-naqra al-ṯāmina 'ašar min al-dawr li-tatimmat tāsi' rāh*
tawallad to be generated
37v *lā yusta'mal fī hank al-nawā naġmat sākāh wa-lā naġmat ramal illā iḏā tawallad min abī salīk wa-'l-nawā anġām*
37v *inn abā salīk min 'uluww ilā hubūṭ wa-'l-nawā min hubūṭ ilā 'uluww fa-kull minhumā 'aks al-āḫar fa-yatawallad minhumā anġām*
ṭabaqa specific pitch range
24v–25r *lā budd min taḥdīd ṭabaqa yu'lam ṭarafāhā wa-wasaṭuhā wa-mā 'štamalat 'alayh al-ṣabaqa min al-naġamāt*
40v *yarfa' ilā niṣf ramal min al-ṭabaqa*
44b *yašīl min rast fī al-ṭabaqa qaddartah dūkātan yaḥuṭṭ 'alā dūkāh min al-ṭabaqa ja'altahā rastan*
personal pitch range
24a *man 'araf ṭabaqatah istarāḥ*
total pitch range
25r *al-ṭabaqa hiya mā yuḥtāj ilayh fī al-qism min al-naġamāt min āḫir al-līn ilā nihāyat al-ḥidda*
25v *qasamt al-ṭabaqa wa-ḥaṣartuhā fa-wajadtuhā tanḥaṣir fī iḥdā wa-'išrīn naġma*
25r *tanḥaṣir al-ṭabaqa bi-'l-naġamāt kamā 'nḥaṣarat al-ḍurūb bi-'l-rāhāt*
36r *ḥiṣār al-iṣbahān a'lā min ḥiṣār al-zīlakand fī al-ṭabaqa*

ṭaraf limit (of pitch range)
24v *lā budd min taḥdīd ṭabaqa yuʿlam ṭarafāhā wa-wasaṭuhā*
26b *qismat al-ṭabaqa wa-ṭarafayhā min al-līn ilā al-ḥidda*
33r–v *ḥijāzī ṭarafuh min al-līn awwal sākāh min awwal al-ṭabaqa min al-līn*
ṯiqal low pitch
28v *bi-mā fīh min al-ḥidda wa-'l-ṯiqal*

ummahāt principal modes
38v *al-hunūk al-ṯamāniya allatī kānat al-rūm al-mutaqaddimūn yajʿalūnahā ummahāt*

waḍʿ composition, setting
24r *an yakūn awwal al-bayt al-ṯānī ġayr waḍʿ awwal al-bayt al-awwal*
wāfaq to agree, concord with
6v *yuwāfiq al-uṣūl li'ann zamanah yutaṣawwar minh farʿān wa-humā dawrā fāḫita*
waliya to follow
10r *li-tumayyizah ʿan al-dawr allaḏī yalīh*
wasaṭ centre (of pitch range)
24v *lā budd min taḥdīd ṭabaqa yuʿlam ṭarafāhā wa-wasaṭuhā*
wasṭānī central (section of composition), i.e. section B of A A B A structure of *ḫafīf*
24r *an yakūn awwal al-bayt al-ṯānī ġayr waḍʿ awwal al-bayt al-awwal wa-yusammūnah wasṭāniyyan*
watar string pl. *awtār* stringed instruments
3v *yaṣūġ al-alḥān li-jawārīh wa-yasmaʿuhā minhunn ʿalā awtār*
wazn pl. *awzān* measure, metre, rhythm
1v *min durar al-ḥikam al-mustaḫraja min biḥār awzān ṣanā'iʿihā*
23r *fī wazn dawr ḍarb min al-ḍurūb*

yuʿīduh abbreviation of *al-sittat ʿašar yuʿīd al-muḫammas al-qaṣīr*

zād to add
37v *tāratan ta'tī bi-hāḏih al-naġamāt bi-kamālihā wa-tazīd ʿalayhā naġma min rast*
zā'id (with) extra (notes)
44b *ta'tī bi-'l-jārkāh nāqiṣatan zā'idatan ... nāqiṣatan ʿan šaylihā ... zā'idatan bi-naġmatayn*
zaman a duration not marked by an attack
7r *tajʿal zamanan min awwal al-dawr ilā ṯāmin ʿašar rāh minh*
17r–v *ijʿal al-rāh al-ṯāmin zamanan ... wa-'jʿal al-rāh al-ʿāšir zamanan li-'stiqbāl dawrayn āḫar fāḫita*
an extended duration
26v *ijʿal lahā zamanan*
total duration of a cycle
7r *inn zamanah arbaʿa wa-ʿišrūn rāhan*
7v *kull dawrayn minh* (i.e. *al-ḫurāsānī*) *zaman li-yuʿīduh*
6r [*al-fāṣilān*] *ṣawtān min īqāʿay naqratayn fī zamanih*
6r *wa-huwa mā yumkin qismat zamanih ilā arbaʿat arbāʿ*
6r *kull dawr lah farʿān fī zamanih*
zaman li-'stiqbāl a duration not marked by an attack
5v *ta'tī bi-ṣawt min īqāʿ naqra min ḥarf min awwalih wa-'l-naqra al-ṯāniya minh tajʿaluhā zamanan li-'stiqbāl al-rāh allaḏī yalīh*
usually associated with the end of a cycle, that is, pending the onset of the next, and appearing therefore as e.g.
7v *zaman li-'stiqbāl dawr āḫar*
zaman mutamakkin a substantial duration
39v *naġma min rast bi-zaman mutamakkin*
zamān a duration (synonym of *zaman*)
8r *ṯānī īqāʿih tajʿal baʿd ḏālik zamānan ilā an taṣil ilā ṯānī ʿašar rāh*

[1] Dozy gives *compter* as well as the more obvious *renfermer* .
[2] Dozy gives *se renfermer dans* .
[3] Dozy gives *inventer, découvrir* .
[4] Dozy gives *se mouler sur* .

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The* ġāyat al-maṭlūb fī ‘ilm al-adwār wa-’l-ḍurūb *by Ibn Kurr

غاية المطلوب في علم الأدوار والضروب

لأبي عبد الله شمس الدين محمد بن عيسى
ابن حسن بن كر البغدادي

١ ب

بسم الله الرحمن الرحيم

يقول العبد الفقير المعترف بالتقصير
أبو عبد الله محمد بن العبد الفقير أبي الروح عيسى بن الأمير الشهيد
فتح الدين حسن بن كر البغدادي غفر الله له ولوالديه ولجميع المسلمين
الحمد لله سامع الأصوات على اختلاف نغماتها
وجامع القلوب على مطربات المحاسن ومحاسن مطرباتها
ومشنف الأسماع بلطائف معاني الأقوال وما اشتملت
عليه من درر الحكم المستخرجة من بحار أوزان صنائعها وصفاتها
والصلاة على سيدنا محمد الذي تفجرت منه ينابيع الحكم
وسرت أقواله في الأفهام فاستنارت منها مواضع الظلم
وعلى آله وأصحابه \ . . . . . . \
١٢ في أنواع الرياضات
وأهل القوة في الشدائد إذا استعر حرها وازدحم

وبعد

فإنه لما كان المقام الشريف العالي ممن ألقى الله إليه أزِمّة
الفضائل والعلوم
وأخذ لنفسه[1] الشريفة من فنونها بنصيب معلوم
فرفع له حجابها وتفتحت لديه أبوابها
وتأكدت بما منح به من الذهن الشريف أسبابها
لا سيما وقد اجتمع له مع ذلك من المفاخر الشريفة

---

[1] أخذ لنفسه : اخدىفسه

ما اشتهر ذكرها في الآفاق   ومن[2] الأوصاف المنيفة[3]
ما يتحدث به السمار والرفاق
ومن المكارم الجميلة   ما عدم تغيرها[4] على الإطلاق
ومن المواهب الجزيلة   ما استقلها لطالب رفده بعد اعتذاره
وإن كثرت في الإنفاق
كم له من صدقات غامرة
وبيض أيادٍ إلا أنها موسومة[5] ظاهرة /
٢ ب ومعروف يسعى على قدم الخضر فهو حاضر كلما كانت
الألسن له ذاكرة
هذا مع ما حواه من شيم مرضية   وسجية سخية
وسلطان في الملك والعلم تأبدا باسمه
وتعاضدا له في العلا على إثبات رسمه
وجود حق للألسن[6] أن تسجع بمدحه سرمدا
وأن يغبر[7] طير حمده فما أحسن تغريده عند وقوع الندى
أحببت أن أطلع علومه الشريفة على ما ألهمني الله له من
معرفة جزء من الموسيقا
وأطلعني على ما لم يطلع عليه كثير ممن يزعم أنه حرزه علما
وعملا وتحقيقا وتدقيقا
فوضعت هذا الكتاب لأتشرف بتقدمته بين يديه

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[2] ومن : من
[3] المنيفة : المسفة
[4] تغيرها : تعمرها
[5] موسومة : موسوبه
[6] وجود حق للألسن : وحود حق الألسن
[7] يغبر : ىعىر

وأفتخر على الأمثال بوقوفه عليه
فإنه نصره الله لا تخفى عليه سبل الفضائل
ولا يدرك غيره ما أدركه منها \ من الأواخر والأوائل ٣ا
وهأنا أظهر منه ما خفي على كثير من الناس
ولم أجد أحدا ممن اشتغل بهذا الفن إلا وقد أعرض عنه
إما قصورا وإما خوفا من الالتباس
فكشفت ما قاله علماء هذا الفن من تقسم أنواع الضروب والأنغام
والوقوف عند أدوار الصناعة وحدودها ودقائقها التي يعجز
عن أدراكها بلاغة الأفهام
وظهر لي ما ألفوه من المقاصد في هذا الفن حتى لقد أضحوا
في هذا النوع كما قال الله تعالى « إِنْ هُمْ إلاَّ كَالأنْعَامِ »
فاستدركت ما فرط منهم في ذلك
وكشفت مغطاه ليقتدي به السالك
واستخرجت منه صنائع   وأبرزت منه بدائع
فذهبت إلى المعاني فجعلت لها صورا
وأظهرتها في حلل الألفاظ تتلو[8] عليها الوضاءة من آيات \ ٣ب
المحاسن سورا
وتصفحت ما نقل عن العجم في هذا الفن فرأيت في أقوالهم
إشكالات ولم أجد أحدا أجاب عنها بجواب مفيد
ولا أشار إلى قريب من الصواب ولا بعيد
مع أن هذا العلم علم رياضي نظر إليها جماعة من السلف رضي الله
عنهم فأثاروا للنفوس رغبة إلى الاطلاع عليه حتى لقد نُقل[9] عن الشيخ

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[8] تتلو : ىتلوا
[9] نُقل : نَقَلَ

العالم الفاضل كمال الدين جعفر بن ثعلب بن جعفر الشافعي الأدفوي في كتابه المسمى بـ« الامتاع في أحكام السماع » قال

قال الأستاذ أبو منصور البغدادي كان عبد الله بن جعفر مع كبر شأنه يصوغ الألحان لجواريه ويسمعها منهن على أوتار وكان أمير ٤ ا المؤمنين إذ ذاك علي بن أبي طالب رضي الله عنه قال \ وكان عبد الله بن جعفر صحابي توفي رسول الله صلى الله عليه وسلم وعمره عشر سنين وكان عبد الله بن عمر إذا رآه يقول السلام عليك يا بن ذا الجناحين رضي الله عنهما

وأما عامر الشعبي رحمه الله فهو من أكابر العلماء علما وعملا وهو تابعي وقد حكى عنه الأستاذ أبو منصور أنه كان يقيم الأصوات إلى الثقيل الأول وإلى الثقيل الثاني وما بعدها من المراتب قال

وإن عطاء بن أبي رباح رضي الله عنه مع علمه وزهده وعبادته ومعرفته بالسنن والآثار وهو تابعي أيضا فقال الأستاذ أبو منصور عنه إنه كان يقيم الأصوات إلى الثقيل الأول وإلى [الثقيل] الثاني وما بعدها من المراتب قال

٤ ب وقال الزبير بن بكّار أخبرني عمي قال أدركتُ \ الناس بالمدينة يغنون لحنا وينسبونه إلى عمر بن عبد العزيز رضي الله عنه قال وهو تابعي قال

وأما عبد الملك بن جريج وهو من العلماء والحفاظ والفقهاء العباد المجمع على جلالته وعدالته وكان يسمع الغناء ويميز بين البسيط والنشيد والخفيف

وذكر أشياء من هذا الباب غير ما ذكرته وإنما اخترت وضع هذه النكتة لئلا يطول الكلام ويمل الواقف عليه فتسأم[10] نفسُهُ ولو

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[10] فتسأم : فتسامه

بسطت الكلام في ذلك لطال
ورأيت الموسيقي عند الناس هو العامل لا العالم وليس الأمر
كذلك بل العلم هو قاعدة العمل وهو الذي عليه يبنى[11]
وإليه أعنّة الاهتمام تثنى
والعمل بغير العلم إنما فاعله كالمحاكي للأنغام والمماثل وإلا فالنفس
٥ ا \ الفاضلة لا تذر أن[12] تتشوق إلى أصل هذا العلم وكيف صدر عن العامل
كما نقل عن السادة العلماء المتقدمين أنهم أقاموا الأصوات إلى الثقيل
الأول وإلى الثقيل الثاني وما بعد ذلك من المراتب ومنهم من يصوغ
الألحان ومنهم من يميز بين البسيط والنشيد والخفيف
فوضعت لتبيان ذلك مقدمتين يعلم منهما أن العلم خارج عن
العمل وليس ذلك موجودا عند أهل العصر
بل من اطلع على أصل هذا العلم يجد قصورا فيما تخيله
الفارابي المكنى بأبي نصر
ولا شك أن العلوم هي مواهب من الله تعالى يهبها لمن يشاء
فغير مستبعد أن يؤخر الله تعالى لبعض المتأخرين
ما عسر على كثير من المتقدمين
هذا إذا وُجد من ينظر إلى كلام الناس بعين الإنصاف
٥ ب بغير حسد يصده \ عن جميل الأوصاف
فالله تعالى يلهم من يطلع على مقالتي في هذا المقال
ليفهم ما أشرت إليه من حسن الصناعة في الأفعال والأقوال
ونشكر الله شكرا يقتضي له مزيد الثواب وها أنا أبتدئ بما
أشرت إليه مستعينا بالله عليه .

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[11] يبنى : تبنى
[12] لا تذر أن : لا بدّوان

المقدمة الأولى

تشتمل على علم الضروب والقِسَم
وهي أحد[1] عشر من الضروب أصول مقسومة من الراهات
والراهات جمع راه
والراه زمن حرفين لكل حرف نقرة[2] في الأول[3] تؤثر إيقاع صوت
يسمع لكنه في غير الآلة[4] تأتي[5] بصوت من إيقاع نقرة من حرف من أوله
والنقرة الثانية منه تجعلها زمنا لاستقبال الراه الذي يليه
وصفته تن تن تن هكذا مسترسلا
١٦ فكل ضرب مقسوم \ من الراهات له فواصل بينه وبين غيره من الضروب[6]
وهي صوتان[7] من إيقاعي نقرتين في زمنه
ويسمى دورا[8] لتكرره في العمل
فتارة يكون رباعيا وهو ما يمكن قسمة زمنه إلى أربعة أرباع

[1] أحد : إحدَى
[2] نقرة : نقرةً
[3] الأول : الأولى
[4] الآلة : الأَله
[5] تأتي : ثانى
[6] الضروب : الراهات
[7] صوتان : صوتين
[8] دورا : دور

وتارة يكون غير رباعي وهو ما لا يمكن قسمة ذلك

فأول إيقاع كل دور رباعي صوت مع نقرة من أول راه هو آخر ثالث ربع منه

وثاني إيقاع الدور صوت مع نقرة من أول راه هو آخر الدور المقسوم

وكل دور له فرعان في زمنه لكل فرع فواصل أيضا

وهي صوتان[9] من نقرتين من حرفين في زمن الدور الشامل للفرعين إن كان رباعيا

فـ[ـأول] نقرة الفرع الأول بعد أول ربع منه وثاني نقرة الفرع الأول صوت من نقرة من أول راه هو آخر ثاني ربع منه

٦ ب والفرع الثاني من الدور أول نقرته بعد \ ثالث ربع من الدور

وثاني نقرته صوت من نقرة من[10] أول راه هو آخر الدور المقسوم[11]

وإن كان غير رباعي فإيقاعاه الفاصلان بينه وبين غيره تأتي[12] صفتهما في موضعها[13]

وأما فرعاه فإن الفرع الأول منه يتصور في الزمن الذي قبل أول إيقاعه

وفرعه الثاني في الزمن الذي بعد أول إيقاعه

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[9] صوتان : صوتين

[10] + من

[11] المقسوم : والمقسوم

[12] تأتي : ثانى

[13] موضعها : موضعهما

وأما ضرب الفاختة فكل دورين منهما دور غير رباعي وهو أصل لهما له إيقاعان فاصلان بينه وبين غيره وهو يوافق الأصول لأن زمنه يتصور منه فرعان وهما دورا[14] فاختة ويخالف الأصول بأنه لا يتصور بعد أول إيقاع الدور وجود فرع ثان[15] للدور وتأتي[16] صفة ذلك في موضعه

فصل

١٧ وبعد فإن الموسيقا تنقسم إلى قسمين \ضروب وأنغام فإذا أردت معرفة الضروب وأن تجعل من الراهات دوائر محصورة تشتمل على أصول وفروع وغيرها فاعلم أن أبعد ما ينقسم من الراهات

الثقيل الأول

فإن زمنه أربعة وعشرون راها بثمانية وأربعين نقرة من ثمانية وأربعين حرفا فهو أربعة أرباع

وصفته تن تن تن تن تن تن تن تن تن تن تن تن ،
تن تن تن تن تن تن   تن تن تن تن تن تن ،[17]

فإذا أردت أن تجعل ضربا من زمن هذه[18] الراهات وتجعلها دورا لتميزها عن الدور الذي يليها فتجعل زمنا من أول الدور إلى ثامن عشر راه منه فيوقَع صوتا مع نقرة من أوله وهي خامس وثلاثون نقرة من

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[14] دورا : دوري
[15] ثان : ثاني
[16] تاتي : ياتى
[17] كل تن في هذا الشطر غير منقوط .
[18] زمن هذه : زمن ، وفوقها : هذه

٧ ب الدور فهذا أول إيقاع هذا الدور ثم تجعل زمنا إلى \ أن تصل إلى رابع
وعشرين راه[19] منه فيوقع صوتا مع نقرة من أوله وهي سابعة وأربعون نقرة
من الدور فهي ثاني إيقاع هذا الدور

والثامنة والأربعون نقرة تكملة أربعة وعشرين[20] راها زمن لاستقبال دور[21] آخر

فصل

في الثقيل الثاني المعروف الآن بالخراساني

فهو زمن اثني[22] عشر راها بأربعة وعشرين نقرة من أربعة وعشرين حرفا

فكل دورين[23] منه فرعان ليعيده[24] لأن كل دورين منه زمن ليعيده وهو أربعة أرباع أيضا

وصفته تن تن تن　　تن تن تن ،
تن تن تن　　تن تن تن ،[25]

فإذا أردت أن تجعل ضربا من هذه الراهات وتجعل له إيقاعين من
١٨ نقرتين فواصل بينه وبين غيره \ فتجعل زمنا من أول الدور إلى أن تصل إلى
تاسع راه منه فيوقع صوتا مع نقرة من أوله وهي سابعة عشر نقرة من الدور

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[19] راه : راها

[20] عشرين : عشرون

[21] لاستقبال دور : الاستقبالِ دورٌ

[22] اثني : اثنا

[23] دورين : دور

[24] ليعيده : لبعيدِه

[25] كل تن في هذين الشطرين غير منقوط .

فهي أول إيقاع هذا الدور

وثاني إيقاعه تجعل بعد ذلك زمانا إلى أن تصل إلى ثاني عشر راه من الدور فيوقع صوتا مع نقرة من أوله وهي ثالثة وعشرون نقرة من الدور والنقرة الرابعة والعشرون تكملة ثاني عشر راه منه زمن لاستقبال دور آخر

فصل

في فرعي الدور الخراساني

فهو أن تجعل زمنا من أول الدور إلى أن تصل إلى رابع راه منه فيوقع صوتا مع نقرة من أوله وهي سابع نقرة من الدور وهي أول إيقاع أول فرع من الدور

وثاني إيقاع الفرع الأول منه يوقع صوتا مع نقرة من أول سادس
راه وهي حادية عشر نقرة \ من الدور ٨ ب

وأما أول إيقاع الفرع الثاني من هذا الد{ور فهـ}ـو أن تجعل زمنا بعد ذلك إلى عاشر راه منه فيوقع صوتا مع نقرة من أوله وهي تاسعة عشر نقرة من الدور

وثاني إيقاع الفرع الثاني من الدور فيوقع صوتا بعد ذلك مع الثالثة والعشرين[26] نقرة من الدور وهي أول ثاني عشر راه منه والرابعة والعشرون نقرة من الدور تكملة ثاني عشر راه زمن لاستقبال دور آخر

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[26] العشرين : العشرون

فصل

في ماشي الخراساني

فهو أن يوقع اثني[27] عشر صوتا من اثنتي[28] عشر نقرة من اثني عشر راها وتكون الإيقاعات من أول كل راه ويكون أول إيقاع[29] مع أول الراه الثالث وهو آخر الربع الأول {من الدور}

وصفته {تِن لين} وبعدها {تِن لين} من[30] أول راهين

١٩ **وصـ{فتما}** \ **تن تن** بالكسر وهو عكس ماشي الضرب الستة عشري الذي يسمونه يعيد[31] المخمس القصير ضرب الثمانية فإذا انتهيت إلى رابع ربع من الدور دخل معك راهين من أول الدور الذي يليه

وقولنا بالفتح ما كان صوته حادا[32] وبالكسر ما كان صوته لينا[33]

فصل

في محرك الخراساني

وهو أن يوقع نقرةً من أول راه **تن** بالفتح ونقرة من أول راه آخر بعده **تن** بالكسر ويوقع أيضا صوتا مع نقرة من أول راه آخر بالفتح وابدل النون

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[27] اثني : اثنا

[28] اثنتي : انى

[29] إيقاع : الايقاع

[30] أكثر النص هنا مشطوب ولا يمكن أن نقرأ إلا شكلا غير واضح لعله يشبه تِن لىن وبعدها
اىـ ن من

[31] يعيد : نعىد

[32] حادا : حدٌ

[33] لينا : لين

بالألف **وصفتها تا** ويوقع بعد ذلك صوتا مع أول نقرة من أول راه آخر بعده بالكسر **تن**

فصل

في شنبر الخراساني

وهو أن تجعل راها زمنا من أول كل ربع من أرباع الدور الخراساني

ويوقع صوتين مع نقرتين من أول[34] راهين آخرهما آخر كل ربع

٩ب \ من أرباع الدور

فيكون إسقاطك من الدور أربع راهات من الدور

فصل

في ضرب أول ثقيل

وهو زمن اثنين وعشرين راها بأربعة وأربعين نقرة من أربعة وأربعين حرفا وهو أربعة أرباع

وصفته تنن تن تن تن ، تنن تن تن تن تن ،

تنن تن تن تن ، تنن تن تن تن تن ،[35]

فآخر الربع الأول من هذا الدور التاء العاشرة من الحروف

وآخر الربع الثاني من الدور التاء الحادية والعشرون من الحروف

وآخر الربع الثالث وهذا أول إيقاع هذا الدور يوقع صوتا مع نقرة من التاء الثانية والثلاثين[36] من حروف هذا الدور

وآخر الربع الرابع وهو ثاني إيقاع هذا الدور يوقع صوتا مع

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[34] أول : اوَ

[35] كل تن في هذين الشطرين غير منقوط وكذلك كل تنن.

[36] الثلاثين : الثلثون

نقرة من التاء الثالثة والأربعين من حروف هذا الدور
١١٠ والحرف الرابع والأربعون\من هذا الدور زمن لاستقبال دور آخر

فصل

في ضرب ثاني ثقيل

وهو من ضرب أحد عشر[37] راها باثنتين[38] وعشرين نقرة من اثنين وعشرين حرفا وهو أربعة أرباع أيضا

كل دورين منه فرعان لأول ثقيل لأن كل دورين منه زمن لأول ثقيل لكن الربع الأول منه زمن خمس حروف براهين ونصف ،

وصفتهم تنن تن

والربع الثاني منه زمن ثلاثة راهات بستة حروف

وصفتهم تن تن تن فهذا تكملة النصف الأول من الدور

والربع الثالث من الدور كالربع الأول والربع الرابع من الدور كالربع الثاني

وصفة الدور تنن تن ، تن تن تن [،] تنن تن [،] تن تن تن

فإذا أردت أن تجعل لهذا الدور إيقاعين فاصلين لتميزه عن الدور
١٠ ب الذي يليه فتجعل \ زمنا من أول الدور إلى أن تصل إلى خامس عشر حرف
من حروف الدور فيوقع صوتا مع[39] نقرة من الحرف المذكور فهو أول إيقاع
هذا الدور

وثاني إيقاع هذا الدور أن تجعل بعد ذلك زمنا إلى أن تصل إلى الحادي والعشرين حرفا من حروف الدور فيوقع صوتا مع نقرة

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[37] أحد عشر : احَدَى وعشر

[38] باثنتين : باثين

[39] مع : من

منه فهو ثاني إيقاع من[40] هذا الدور

والحرف الثاني والعشرون[41] تكملة هذا الدور زمن لاستقبال دور آخر

فيكون آخر الربع الأول نقرة من رابع حرف من الدور

وآخر الربع الثاني من الدور نقرة من عاشر حرف منه

وآخر الربع الثالث من الدور نقرة من خامس عشر حرفا من حروف الدور

وآخر الربع الرابع من الدور نقرة من حادي وعشرين حرفا [من] الدور

١١١ والحرف الثاني وعشرون[42] تكملة الدور زمن لاستقبال \ دور آخر

فصل

في فرعي ثاني ثقيل

وأما فرعا[43] ثاني ثقيل فهو أن يوقع صوتا مع نقرة من سادس حرف من الدور فهي أول إيقاع الفرع الأول

وثاني إيقاع الفرع الأول تجعل بعد ذلك زمنا إلى أن تصل إلى عاشر حرف من حروف الدور فيوقع صوتا مع نقرة منه فهي ثاني إيقاع الفرع الأول

وأول إيقاع الفرع الثاني من الدور أن تجعل بعد ذلك زمنا إلى أن

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[40] من : مع

[41] والعشرون : والعشرين

[42] وعشرون : وعشرين

[43] فرعا : فرعى

تصل إلى سابع عشر حرف من حروف الدور فيوقع صوتا معه فهو أول إيقاع الفرع الثاني من الدور[44]

وثاني إيقاع الفرع الثاني من الدور أن تجعل بعد ذلك زمنا إلى أن تصل إلى الحادي والعشرين حرفا من حروف الدور فيوقع[45] صوتا مع نقرة منه فهي ثاني إيقاع الفرع الثاني من الدور

١١ ب والحرف الثاني والعشرون[46] \ تكملة الدور زمن لاستقبال دور آخر

فصل

في ماشي ثاني ثقيل

وهو أن يوقع اثنا عشر صوتا من اثنتي عشر[47] نقرة من اثني عشر حرفا كل ثلاثة من ربع دور

فالربع الأول صوتان[48] من نقرتين أولهما من أول ثلاثة حروف وصفتهما **تَن** بالفتح [وصوت من نقرة من أول حرفين وصفته **تن**]

والربع الثاني من الدور ثلاثة أصوات من ثلاث نقرات من ثلاث راهات من أول كل راه نقرة

وصفتهم **تن تن تن**[49] النقرتان الأولتان بالكسر والثالثة بالفتح

والربع الثالث من الدور كالربع الأول منه

[44] + الثاني من الدور

[45] فيوقع : فتوقع

[46] والعشرون : والعشرين

[47] اثنتي عشر : اثني عشر عشر

[48] صوتان : صوتين

[49] كل تن غير منقوط .

والربع الرابع من الدور كالربع الثاني منه

فصل

في محرك ثاني ثقيل

وأما محركه فمحرك الخراساني

وله محرك آخر يشاركه الخراساني والضرب التركي فيه

وله ميزان **تت تتن تتن تتن**[50]

١١٢ ويسمى الحربي لاستعماله في الحرب \ لكنه يسمى العريجاء [أيضا] وهو معروف لأنه عرج عن الخراساني إلى التركي لأن أول الدور من ثاني ثقيل يشبه أول الضرب التركي وأول النصف الثاني منه [يشبه] أول النصف الثاني من التركي وباقي زمن هذا الدور من راهات الخراساني

فصل

في الضرب المخمس الطويل

وهو زمن عشرين[51] راها بأربعين نقرة من أربعين حرفا وهو أربعة أرباع كل ربع خمس راهات فلذلك يسمى بالمخمس الطويل وهو أصل لأصل الفاختة لأن كل دور منه أربعة ضروب من الفاختة ودوران[52] من أصل الفاختة

وصفته **تن تن تن تن تن** ،
تن تن تن تن تن ،

---

[50] تتن الاخير غير منقوط .

[51] عشرين : عشرون

[52] ودوران : دورىن

تن تن تن تن ، تن تن تن تن تن ،[53]

١٢ ب وهو أصل باعتبار أن[54] له فرعين غير ضرب الفاختة / يختص بهما[55] وماشي ومحرك

فإذا أردت أن تجعل لهذا الدور إيقاعين فاصلين لتميزه عن الدور الذي يليه فتجعل زمنا من أول الراهات إلى أن تصل إلى خامس عشر راه من الدور فيوقع صوتا مع نقرة من أوله وهي تاسعة وعشرون[56] نقرة من هذا الدور وهي أول إيقاع هذه الدور

وثاني إيقاع هذا الدور يوقع[57] صوتا مع نقرة من أول راه وهو كمال العشرين راها من هذا الدور وهي التاسعة والثلاثون نقرة من هذا الدور

وتمام الأربعين نقرة كمال العشرين راها منه تجعلها زمنا لاستقبال الدور الذي يليه

فصل

في فرعي المخمس الطويل

وهو أن تجعل زمنا من أول الدور إلى أن تصل إلى سابع راه
١٣ ا منه فيوقع صوتا مع أوله وهي ثالثة عشر نقرة من الدور فهي أول \ إيقاع الفرع الأول

وثاني إيقاع الفرع الأول يوقع صوتا مع تاسعة عشر نقرة وهي أول عاشر راه من الدور

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[53] كل تن في هذا الشطر غير منقوط .

[54] باعتبار أن : باعتبارات

[55] بهما : به

[56] وعشرون : وعشرين

[57] يوقع : ويوقع

وأول إيقاع الفرع الثاني من الدور يوقع[58] صوتا مع ثالث وثلاثين نقرة من الدور وهي أول سابع عشر راه من الدور

وثاني إيقاع الفرع الثاني من الدور يوقع صوتا مع تاسعة وثلاثين نقرة وهي أول راه هو كمال عشرين راها منه وتمام أربعين نقرة من الدور تجعلها زمنا لاستقبال دور آخر يليه

فصل

في ماشي المخمس الطويل

وهو أن يوقع عشرين صوتا من عشرين نقرة من أول كل راه نقرة من عشرين راها من كل ربع خمس نقرات من أول خمس راهات أربعة بالكسرة والخامس بالفتح في كل ربع من أرباع الدور تفعل كذلك

فصل

١٣ب \ في محرك المخمس الطويل العشريني

وهو محرك الضرب الستة عشري يعيد المخمس القصير وإنما سمى القصير مخمسا وإن كان زمنه زمن ثمان راهات لأن زمنه إلى الإيقاع خمس راهات وما اشتهر في الضروب مخمسا إلا هو وإن شاركه الضرب الخسرواني[59] بأن زمنه إلى الإيقاع خمس راهات أيضا[60]

والمحرك مشترك بين[61] العشريني والستة عشري وضرب الثمانية أيضا وتأتي صفته في محرك الستة عشري

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[58] يوقع : فيوقع

[59] الخسرواني : الخصرواني

[60] + فلما اشتهر في الضروب مخمسا إلا هو

[61] بين : من

فصل

في الضرب الستة عشري يعيد المخمس القصير
وهو نوع من الثقيل الأول وزمنه زمن ستة عشر راها اثنتان[62]
وثلاثون نقرة من اثنين وثلاثين حرفا وهو أربعة أرباع

١١٤ وصفته \[63] تن تن تن تن
تن تن
تن تن
تن تن
تن تن
تن تن تن تن كمل

وإذا أردت أن تجعل له إيقاعين فاصلين [لتميزه عن غيره][64]
فتجعل زمنا من أول الدور إلى أن تصل إلى ثاني عشر راه منه فيوقع
صوتا مع نقرة من أوله وهي ثالث وعشرون نقرة من هذا الدور
(وثاني إيقاع الدور) أن تجعل بعد ذلك زمنا إلى سادس عشر راه
من الدور فيوقع صوتا مع نقرة من أوله وهي الحادية والثلاثون[65] نقرة
من الدور والثانية والثلاثون نقرة من هذا الدور تكملة سادس عشر راه
منه تجعلها زمنا لاستقبال دور آخر

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[62] اثنتان : اثنان

[63] + صفته . وشكل الجدول مربع في كل ضلع منه خمسة تن وهذا غلط . هذا واتجاه الخط دائري مما يؤدي إلى أن السطر التحتاني مقلوب .

[64] أو لعله :[لتميزه عن الدور الذي يليه]

[65] والثلاثون : والثلثين

١٤ب

\فصل

في الضرب المخمس القصير

وهو نوع من الثقيل الثاني

وهو زمن ثمان راهات ست عشر نقرة من ستة عشر حرفا

وهو أربعة أرباع أيضا

وصفته **تن تن** ، **تن تن** ، **تن تن** ، **تن تن** ،[66]

فكل دورين منه فرعان ليعيده كما أن الدور من[67] الخراساني فرعان ليعيده

فإذا أردت أن تجعل لهذا الدور إيقاعين فاصلين لتميزه عن غيره فتجعل زمنا من أول الدور إلى أن تصل إلى سادس راه فيوقع صوتا مع نقرة من أوله وهي حادية عشر نقرة من هذا الدور وهي أول إيقاع هذا الدور

وثاني إيقاع هذا الدور أن تجعل زمنا بعد ذلك إلى أن تصل إلى ثامن راه فيوقع صوتا مع نقرة من أوله وهي خامسة عشر نقرة من هذا الدور

١٥ا والنقرة السادسة عشر من هذا \ الدور تكملة الراه الثامن منه تجعله زمنا لاستقبال دور آخر

وسمي مخمسا لما ذكرناه فإن زمنه إلى الإيقاع خمس راهات

فصل

في فرع[68] المخمس القصير

وهو أن تجعل زمنا من أول الدور إلى أن تصل إلى ثالث راه

---

[66] كل تن في هذا الشطر غير منقوط

[67] الدور من : الدورين

[68] فرع : ماشي

منه فيوقع صوتا مع نقرة من أوله وهي خامس نقرة من الدور وهي أول إيقاع الفرع الأول من هذا الدور

وثاني إيقاع الفرع الأول منه يوقع صوتا مع سابع نقرة من الدور وهي أول رابع راه من الدور

وأول إيقاع الفرع[69] الثاني من هذا الدور يوقع صوتا مع نقرة من أول سابع راه من الدور وهي ثالث عشر نقرة من هذا الدور[70]

١٥ ب وثاني إيقاع الفرع الثاني \ من الدور ويوقع صوتا مع أول الراه الثامن من الدور وهي خامسة عشر نقرة من هذا الدور

والسادسة عشر نقرة من هذا الدور تكملة الراه الثامن تجعلها زمنا لاستقبال دور آخر

فصل

في ماشي المخمس القصير

وهو ثلاث أصوات من ثلاث نقرات من ثلاث حروف أولها من أول أربع حروف والحرف الرابع زمن لاستقبال ثلاثة أصوات من ثلاث نقرات أولها من أول أربع حروف كذلك كل أربعة من ذلك يدور ،

وصفته **تنتن تنتن تنتن تنتن**[71]

فهو من ستة عشر حرفا بثمان راهات

وأما محركه فهو محرك يعيده

---

[69] الفرع : الدور

[70] + ٮوقع صوتا مع نقره من اول سابع راه من الدور وهي ٮالث عشر ٮقرة من هذا الدور

[71] لا يُنقط إلا تنتن الأول

فصل

في ماشي يعيد المخمس القصير

وهو أن تجعل راها زمنا من أول الدور ويوقع صوتا مع نقرة من أول
١١٦ الراه الثاني \ وصوتا أيضا من نقرة من أول الراه الثالث

وصفتهما **تِن تِن** بالكسر

ويوقع بعد ذلك صوتا مع نقرة من أول الراه الرابع

وصفتها[72] **تن** بالفتح

فهذه كمال ربع هذا الدور فكل أربعة أعمال من هذا بدور كامل عكس ماشي الضرب الخراساني

فصل

في[73] محرك يعيد المخمس القصير

وهو أن يوقع صوتا مع نقرة من أول راه

وصفتها **تن** بالفتح

ويوقع بعدها صوتا مع نقرة من أول راه ثان لها

وصفتها **تِن** بالكسر

فإذا استرسلت فافعل كذلك نقرة من أول راه بالفتح ونقرة من أول راه بعده بالكسر

وهو محرك الضرب العشريني مخمس الأرباع ومحرك المخمس القصير ضرب الثمانية أيضا

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[72] وصفتها : وصفتهما

[73] + في

فصل

في شنبر يعيد المخمس القصير والقصير أيضا

١٦ب وهو أن \ يوقع صوتين من نقرتين من أول راهين من الدور
واجعل راهين بعد ذلك زمنا لاستقبال صوتين من نقرتين من
أول راهين آخر فيكون إسقاطك من الدور ثمان راهات تجعلها زمنا
ويوقع ثمانية أصوات من ثمان نقرات نقرة من أول كل راه من ثمان
راهات فيكمل الدور ستة عشر راها

ونصف هذا العمل للمخمس القصير

فصل

في أصل ضرب الفاختة

وهو عشر راهات بعشرين نقرة من عشرين حرفا وهو غير
رباعي

وصفته **تنن تنن تن تِنن تِنن[74] تِن تِن تِن**

فإذا أردت أن تجعل لهذا الدور إيقاعين فاصلين [لتميزه عن الدور
الذي يليه] فتجعل زمنا من أول الدور إلى أن تصل إلى التاء الثالثة عشر من
١٧ا الحروف وهي أول سابع راه من \ الدور فيوقع صوتا مع نقرة من الحرف المذكور
وهي أول إيقاع هذا الدور

وثاني إيقاع هذا الدور أن تجعل زمنا بعد ذلك إلى أن تصل
إلى سابع عشر نقرة من الدور وهي أول تاسع راه فيوقع معها صوتا
والنقرة الثامنة عشر من الدور لتتمة تاسع راه وعاشر الراه معها تكملة الدور
زمن لاستقبال دور آخر

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[74] تنن تنن تن تِنن تِنن : سن سن من تِسن سِن

فصل

في فرعي هذا الأصل

وهو أن يوقع صوتا مع نقرة من أول الراه الأول ونقرة من أول الراه الثاني واجعل الراه الثالث زمنا

ثم يوقع صوتا مع نقرة أول الراه الرابع واجعل ذلك الراه الخامس زمنا بعد ذلك فهذا دور فاختة وهو فرع من ذلك الأصل

ثم يوقع صوتا مع نقرة من أول الراه السادس

١٧ب ويوقع صوتا مع نقرة من أول الراه السابع واجعل \ الراه الثامن زمنا

ثم يوقع صوتا من أول الراه التاسع واجعل الراه العاشر زمنا لاستقبال دورين آخر فاختة

فهما فرعان لذلك الأصل الذي يشملهما زمنه وهو عشرون نقرة من عشر راهات

فصل

فإذا أردت أن تجعل لأصل الفاختة ماشيا فإنك تستعمل ماشي الضرب الستة عشري فإن أصل الفاختة عشر راهات وتعير له من راهين فيصير زمن اثني[75] عشر راها فيكون نصف وربع الستة عشري

فصل

في الضرب التركي

وهو اثنتا[76] عشر نقرة من اثني عشر حرفا وزمنه من ست راهات وهو أربعة أرباع أيضا

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[75] اثني : اثنا

[76] اثنتا : اثنى

وصفته   تَتَـن تَتَـن تَتن تَتن

فإذا أردت أن توقع لهذا الضرب إيقاعين فاصلين لتميزه عن الدور
١٨ا الذي يليه فتجعل زمنا من أول الدور \ إلى أن تصل إلى ثامن حرف من
حروف الدور فيوقع صوتا مع نقرة مع الحرف الثامن فهو أول إيقاع هذا الدور

وثاني إيقاع هذا الدور أن تجعل بعد ذلك زمنا إلى الحرف
الحادي عشر من حروف الدور فيوقع صوتا مع نقرة من الحرف الحادي عشر
والحرف الثاني عشر تكملة الدور زمن لاستقبال الدور الذي يليه

فصل

في فرعي الضرب التركي

وأما فرعا[77] الضرب التركي فيكون أول إيقاع الفرع الأول مع
النون الثالثة من الدور

وثاني إيقاع الفرع الأول مع النون الخامسة من الدور[78]

وأول إيقاع الفرع الثاني من الدور مع النون التاسعة منه

وثاني إيقاع الفرع الثاني مع النون الحادية عشر

١٨ب والحرف الثاني عشر تكملة \ الدور زمن لاستقبال الدور الذي
يليه

فصل

في ماشي الضرب التركي

وهو أن يوقع ثمانية أصوات من ثمان نقرات من ثمان حروف
صوتين من نقرتين من حرفين متواليين[79] أولهما من أول الدور والحرف

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[77] فرعا : فرعى

[78] + وىاىي اىقاع الفرع الأول مع الىون الحامسة من الدور

[79] متواليين : متوالس

الثالث تكملة الربع الأول من الدور زمن لاستقبال صوتين من نقرتين من حرفين متواليين أولهما من أول ربع ثان للدور

والحرف الثالث من الربع الثاني زمن لاستقبال [صوتين من نقرتين من حرفين متواليين أولهما من أول الربع الثالث للدور والحرف الثالث من الربع الرابع زمن لاستقبال] صوتين من نقرتين من حرفين متواليين أولهما من أول الربع الرابع للدور والحرف الثالث من الربع الرابع زمن لاستقبال الدور الذي يليه

فيكون أربع حروف أواخر الأرباع الأربعة من الدور زمن وثمان حروف من الدور نقرات

فصل

وأما محركه فمحرك الخراساني فكل دورين من ضرب التركي
١١٩ \بدور[80] من ضرب الخراساني[81] لأن الخراساني أربع شنابر وشنبر الخراساني
فرع لضرب التركي

فصل

في الضرب الخسرواني

وهو نصف وربع الخراساني وهو أصل باعتبار أن[82] له فرعين

وهو تسع راهات بثمانية عشر نقرة من ثمانية عشر حرفا وهو غير رباعي

وصفتة **{تن تن تن} تن تن تن تن تن تن**

---

[80] بدور : التركي بدور

[81] + وكل دورين من ضرب التركي بدور من ضرب الخراساني

[82] باعتبار أن : باعتبارات

فإذا أردت أن تجعل لهذا الدور صوتين من إيقاعين [فاصلين] لتميزه عن الدور الذي يليه فتجعل خمس راهات من أول الدور زمنا وتوقع صوتا مع نقرة من أول الراه السادس وهي حادية عشر نقرة من الدور وهي أول إيقاع هذا الدور

١٩ب وثاني إيقاع هذا الدور أن[83] تجعل \ بعد ذلك زمنا إلى تاسع راه من الدور فتوقع صوتا مع نقرة من أوله وهي سابعة عشر نقرة من الدور والثامنة عشر نقرة من الدور تكملة الراه التاسع زمن لاستقبال دور آخر

فصل

في فرعي الضرب الخسرواني[84]

وهو أن يوقع صوتا مع نقرة من أول الراه الرابع من الدور

ويوقع أيضا صوتا مع نقرة من أول الراه السادس من الدور فهذا الفرع الأول

والفرع الثاني من هذا الدور أن يوقع صوتا مع نقرة من أول الراه السابع

ويوقع أيضا صوتا مع نقرة من أول الراه التاسع فهذا الفرع الثاني من هذا الدور وثاني نقرة الراه التاسع زمن لاستقبال دور [آخر]

وأما ماشيه ومحركه فماشي الخراساني ومحركه لأنه مختصر منه

---

[83] أن : وان

[84] الخسرواني : الحصرواني

فصل

في ضرب الورشان

١٢٠ وهو زمن سبع راهات بأربع عشر نقرة من أربعة \ عشر حرفا

وهو أصل باعتبار أن له فرعين وهو غير رباعي أيضا

وهو مختصر من المخمس ناقص عنه براه من الزمن الذي قبل أول إيقاع المخمس

وصفته **تن تن تن تن تن تن تن**[85]

فإذا أردت أن تجعل لهذا الدور إيقاعين فاصلين بينه وبين غيره فاجعل من أول الدور أربع راهات زمنا وتوقع صوتا مع نقرة من أول خامس راه وهي تاسع نقرة من الدور وهي أول إيقاع هذا الدور

وثاني إيقاع هذا الدور أن تجعل بعد ذلك زمنا إلى سابع راه فتوقع صوتا مع نقرة من أوله وهي ثالثة عشر نقرة من الدور

والنقرة الرابعة عشر تكملة الراه السابع زمن لاستقبال[86] دور آخر

فصل

في فرعي الورشان

٢٠ ب وهو أن تجعل أول \ راه من الدور زمنا وتوقع إيقاعين إيقاع مع نقرة من أول الراه الثاني من الدور وإيقاع مع نقرة من أول الراه الثالث فهذا الفرع الأول من هذا الدور

والفرع الثاني من هذا الدور أول إيقاعه إيقاع مع نقرة من أول الراه السادس وثاني إيقاعه نقرة من أول الراه السابع

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[85] كل تن غير منقوط

[86] لاستقبال : الاستقبال

والنقرة الرابعة عشر تكملة الراه السابع زمن لاستقبال دور آخر

فصل

في دائرة المخمس القصير في الآلة

وهي دائرة صحيحة الميزان ستة عشر نقرة من ستة عشر حرفا زمن
ثمان راهات لكنها مخالفة لدائرة نصف اليعيد[87] على حكم الراه
وما يقع الاختلاف غالبا إلا في المخمس فمن لم يعلم حكم الراه
١٢١ ومطابقة الدائرة في الآلة الراه وإلا تعب وأتعب وهذه الدائرة رباعية \ أيضا
وصفة ميزانها **تنن تنن تن ، تنن تنا تن**[88]
فرأس الربع الأول منها التاء الأولة من حروف الدائرة
ورأس الربع الثاني منها التاء الخامسة من حروف الدائرة
ورأس الربع[89] الثالث منها مع التاء التاسعة من حروف الدائرة
ورأس الربع الرابع منها مع التاء الثالثة عشر من حروف الدائرة وهو أول سابع راه
فهذه رؤوس الأرباع على حكم الدائرة
ورؤوس الأرباع على حكم الراه
رأس الربع الأول أول الراه الثاني وهو ثالث حرف من حروف الدور
ورأس الربع الثاني أول الراه الرابع وهو سابع حرف من حروف الدور
ورأس الربع الثالث أول الراه السادس وهو حادي عشر حرف

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[87] اليعيد : البعد
[88] كل تنن الخ غير منقوط
[89] + الرابع

من حروف الدور

٢١ ب وراس الربع الرابع أول الراه[90] الثامن وهو خامس عشر \ حرف من حروف الدور

فحصلت المخالفة بين الدور وبين الدائرة في رؤوس الأرباع

فأول هذه الدائرة ثاني إيقاع الفرع لدائرة قبلها

وأول سابع راه منها نقرته هي أول إيقاع فرع يكمل بإيقاع من نقرة من أول دائرة تليها[91]

ولا يحصل من هذه[92] الدائرة فرع كامل إلا بدائرتين بخلاف نصف اليعيد[93] على حكم الراه فإنه ثمان راهات يحصل منه زمن فرع[94] كامل إلى خامس عشر نقرة

وبينهما المخالفة أيضا فإن موضع الإيقاع على حكم الراه وهو الراه الثامن يبقى زمنا على حكم الدائرة لاستقبال الدائرة الأخرى

[و]موضع الإيقاع[95] على حكم الدائرة وهو أول نقرة لفرع يكمل بثاني نقرة [من ثاني راه] من أول دائرة أخرى

فصل

في نصف وربع المخمس

٢٢ ا وهو ست راهات زمن اثنتي[96] عشر نقرة \ من اثني عشر حرفا

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[90] الراه : راه

[91] تليها : يليها

[92] هذه : هذا

[93] اليعيد : البعيد

[94] فرع : وفرع

[95] الإيقاع : الزمن

[96] اثنتي :

وصفته **تِن تِن تِن ، تِن تِن تِن ،**

وفيه مصنفات لكنه ليس بأصل لأنه ليس له فرع

فزمنه إلى الإيقاع ثلاث راهات ويكون أول إيقاع هذا الدور صوتا مع نقرة من أول الراه الرابع وهي سابع نقرة من الدور

وثاني إيقاع هذا الدور يوقع صوتا من نقرة من أول الراه السادس وهي حادية عشر نقرة من هذا الدور

والثانية عشر نقرة من هذا الدور تكملة الراه السادس زمن لاستقبال دور آخر على صفته

فهذا مصطلح من جملة المصطلحات وليس بأصل

فصل

وما عدا ذلك من المركبات فكثير لا يعتدّ بالمركب أصلا[97] لأنه بعض أصل تركب عليه بعض أصل آخر

فإن أتي بفرع من ذلك كان فرعا[98] لذلك الأصل المركب

\ **وأما المصطلح** ٢٢ ب

هو أن تأتي بعمل في أزمنة مصطحبة الوزن مصطحبة الإيقاعات ولها إيقاعات فواصل[99] بين الأزمنة

ولا يمكن أن تأتي بفرعين مبتكرين في الأزمنة تختص به

---

[97] أصلا : أصل

[98] فرعا : فرع

[99] مصطحبة الوزن مصطحبة الإيقاعات ولها إيقاعات فواصل : مصطحبة الوزن ولها إيقاعات مصطحبة الإيقاعات فواصل

فصل

الداخل

هو أن تأتي بالعمل في وزن زمن الضرب الذي صنف العمل في ميزانه وتأتي بإيقاع ذلك الضرب في مراكزه

فصل

الخارج

هو أن تأتي بالعمل ناقصا أو زائدا عن ميزان وزن زمن الضرب الذي صنف العمل في ميزانه

فصل

الخارج الداخل

على قسمين فتارة تخرج من ضرب أصل إلى ضرب أصل آخر
مثل أن تأتي بشيء صنف في ضرب ثاني ثقيل تنقله إلى الخراساني فهذا
خارج عن هذا[100] وداخل في هذا ١٢٣

وتارة تخرج عن عمل \ صنف في وزن أصل إلى غير أصل فهذا خارج [عن هذا وداخل في هذا] ولا يعتد به مصطلحا وإن كان مصطحب الوزن مصطحب الإيقاعات لابتدائه[101] على أصل وخرج عن ذلك الأصل إلى غير أصل

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[100] خارج عن هذا : داخل في هذا

[101] لابتدائه : لامثناه؟

فصل

المقلوب

هو أن تأتي بالعمل في زمن[102] الضرب الذي صنف العمل
في ميزان زمنه وتأتي بالفواصل في غير مراكزها في العمل

فصل

صحيح الدور

هو أن تأتي بالعمل[103] في وزن دور ضرب من الضروب دخوله من
[أول] راه وانفصاله على راه تكملة عدد الدور
وتأتي بالعمل من مكان الدخول[104] من غير تفويت زمن بلا عمل

فصل

صحيح العمل لا صحيح الدور

هو أن تأتي بالعمل من بعض الدور وتنفصل على إيقاع دور آخر
٢٣ ب وإذا أعاد يفوت زمنا من دور بلا عمل إلى أن تأتي إلى بابه الذي \ دخل
منه فيدخل منه أيضا فيأتي ببعض الدور زمنا بلا عمل وتنفصل على إيقاع
الدور أيضا

فصل

صحيح الدور صحيح العمل

هو أن تأتي بالدور كامل العمل وتنفصل على إيقاع من غير تفويت

[102] كذا في الهامش ، وفي النص : ميزان

[103] بالعمل : العمل

[104] بالعمل من مكان الدخول : بالدخول من مكان دخل

زمن بلا عمل

فصل

القبل

وهو أن تأتي بالعمل قبل أول الدور

المع

هو أن تأتي بالعمل مع أول إيقاع الدور

البعد

هو أن تأتي بالعمل بعد أول إيقاع الدور إلى آخر الدور وإن أتي مع ثاني إيقاع الدور فهو بعد[105]

البسيط

متقدم على النشيد في العمل وهو عمل من غير شعر يتخلله
فمنه ما ينحصر في زمن ضرب مقسوم وهو الاستبداء
ومنه ما لاينحصر في ذلك بل يحصره زمن الراهات المسترسلة وهو البيشروه

النشيد

شعر ملحن بغير زمن ضرب \ مقسوم يحصره جملته ١٢٤
فمنه ما ينحصر بعضه في ضرب مقسوم ومنه ما لا ينحصر

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[105] بعد : بُعدٌ

الخفيف

شعر ملحن يشتمل على بيتين من الشعر وما زاد عليهما كذلك ومن شرطه أن يكون أول البيت الثاني غير وضع أول البيت الأول ويسمونه وسطانيا

فإن كان وضع أول البيت الثاني كوضع أول البيت الأول فهو الساذج وإن حصر كلا منهما زمن ضرب مقسوم

فصل

المعاونة ملاحقة لا مسابقة

القظيع الداخل أولى من الصيت الخارج ويسمونه العجم ناساز ومن عرف طبقته استراح

وعمل ينحصر في زمن ضرب أولى من عمل لا ينحصر في زمن ضرب وإن كان مطربا . تم

تمت المقدمة الأولى

التي اشتملت[106] على علم الضروب والقِسم

٢٤ ب ونبتدئ / إن شاء الله بالمقدمة الثانية التي تشتمل على علم الأنغام بحمد الله وكرمه ، وهو حسبنا .

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[106] كذا في الهامش ، وفي النص : تشتمل

٢٤ب

المقدمة الثانية

التي تشتمل على علم الأنغام

والأنغام جمع نغم

والنغم هو الصوت الكامل المتحرك في اصطلاح من تقدم من السلف يشتمل على نغمات ملائمة

وكل صوت يشتمل على نغمات مخصوصة على صفة مخصوصة يحصل منها الطرب

ولكنه لا يسمى عند العجم هنكا[1] لأن الهنك من شرطه أن يكون رابعا لأربعة أصوات مطربة يشيل الأسفل إلى الأعلى[2] ويحط الأعلى على الأسفل وكل منهم يسمى هنكا باعتبار ذلك

فإذا أردت معرفة ذلك فلا بد من تحديد طبقة يُعلم طرفاها ووسطها \ وما اشتملت عليه الطبقة من النغمات

وتنحصر الطبقة بالنغمات كما انحصرت الضروب بالراهات

وينقسم منها ما يأتي ذكر كل واحد في موضعه

والطبقة هي ما يحتاج إليه في القسم من النغمات من آخر[3] اللين إلى نهاية الحدة وهو [من] آخر الهبوط إلى نهاية العلو

والنغمات جمع نغمة

والنغمة هي النطق بزمن حرفين أو ما حاكى ذلك أو بحرفين من

[1] هنكا : هنك

[2] الأعلى : الأعلا

[3] آخر : اخز

الحروف المناسبة مثل التاء[4] والألف والتاء والنون والنون والألف والنون مع النون وما ناسب ذلك من الحروف المناسبة لذلك بغير مد بآخر الحرفين يؤثر زمنا زائدا للحرف الأخير إلا النغمة المسماة بالرست والمايه ولا بد من الموالاة من النغمات

وأصل الأنغام النغمة كما أن أصل الضروب الراه ولكن النغمة تندرج حروفها وتقل \ أزمنتها وتزاد مع بقاء استعمال مداتها[5] في العمل إلا الراهات لا بد من زمن حروفها لضبط موازين[6] أزمنة الضروب ٢٥ ب

فقسمت الطبقة وحصرتها فوجدتها تنحصر في إحدى وعشرين نغمة أولها لين وآخرها أحد نغمة ومن أول نغمة[7] إلى نهاية الحادية والعشرين تشتمل على تسمية ستة رسوت وخمسة أرمال وخمس دوكاة وخمس ساكاة بين الرسوت بين كل رست ورست نغمة رمل ونغمة دوكاة فوقها ونغمة ساكاة فوق الدوكاة

[و]تنقسم من الطبقة سازان[8] وأصوات ملائمة وتأتي أسماؤها[9] التي اصطلحت عليها أهل هذا العصر

فالرسوت حدود يضبط بها الطبقة والقسم[10]

وتسمية[11] نغمة بالرمل ونغمة بالدوكاة ونغمة بالساكاة ما بين الرسوت ضبطا [12] لميزان القسمة وتعريفا لكيفية الصوت من نهاية هبوطه

4 التاء : الىاء

5 مداتها : مدآيها

6 لضبط موازين : ضبط الموارين

7 أحد نغمة ومن أول نغمة : حدّ نغمة احد من نعمه

8 سازان : شازان

9 أسماؤها : اسمها

10 الطبقة والقسم : الطبقَةَ والقِسمُ

11 تسمية : نسميه

12 ضبطا : ضبط

١٦٢ \ إلى نهاية علوه وما اشتمل عليه من نغمة

ونغمة الرمل فاصلة بين الأنغام لعدم استعمالها مع استعمال ما تحتها من اللين وما فوقها من الحدة في غالب الأصوات

وعند قسمة حدود الطبقة فالرست الأول وهو أول نغمة من الطبقة وهو آخر اللين والرست الثالث وهو تاسع نغمة من اللين والرست الخامس وهو سابع عشر نغمة من اللين ساز واحد بما فيه من الحدة والثقل

والرست الثاني وهو خامس[13] نغمة من اللين والرست الرابع وهو ثالث عشر نغمة من اللين والرست السادس وهو الحادي والعشرون[14] نغمة من اللين وهو نهاية النغمات وآخر الطبقة من الحدة ساز واحد بما فيه من الحدة والثقل

٢٦ ب هذا ما \ قاله الموسيقاريون والصحيح أن الطبقة ينقسم[15] منها ساز واحد وهو أول نغمة من اللين [وخامس نغمة من اللين] وحادي عشر نغمة من اللين

هؤلاء الثلاث نغمات ساز واحد بما فيهم من الحدة والثقل

فإذا أردت معرفة قسمة الطبقة وطرفيها[16] من اللين إلى الحدة وما اشتملت عليه من النغمات الضابطة لميزان القسمة كما ذكرناه أولا فخذ نغمة[17] من الرست وتكون نغمة الرست الأول وهي نغمة من آخر الطبقة من اللين واجعل لها زمنا

ولا تستعمل[18] نغمة الرمل الذي فوق الرست بل تستعمل

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13 خامس : الخامس

14 العشرون : العشرين

15 ينقسم : تنقسم

16 طرفيها : طرفاها

17 فخذ نغمة : فحدّ النغمه

18 تستعمل : يستعمل

نغمة[19] من الدوكاة التي فوق الرمل بغير زمن

وتستعمل نغمة من الساكاة التي فوق الدوكاة بغير زمن

٢٧ ا وتستعمل نغمة من الرست الذي فوق الساكاة وهو الرست \ الثاني من اللين واجعل لها زمنا

ثم اعكس العمل فخذ نغمة من الرست الثاني من اللين واجعل لها زمنا

ثم نغمة[20] من الساكاة التي تحت الرست الثاني بغير زمن

[ثم نغمة من الدوكاة التي تحت الساكاة بغير زمن

ولا تستعمل نغمة الرمل الذي تحت الدوكاة]

ثم نغمة من الرست الأول وهو آخر اللين واجعل لها زمنا

ثم ترتفع فتأخذ نغمة من الرست الثاني من اللين ثانية واجعل لها زمنا

فهذا حد جيد مقسوم من الطبقة من رست إلى رست أعلى[21] منه

ثم تفعل من الرست الثاني إلى الرست الثالث[22] كذلك

ومن الرست الثالث إلى الرست الرابع كذلك

ومن الرست الرابع الى[الر]ست الخامس كذلك

ومن الرست الخامس إلى الرست السادس كذلك وهو آخر الحدة من الطبقة

فمن ذلك تعرف حدود الطبقة وما اشتملت عليه من النغمات

٢٧ ب وتنحصر [الطبقة] بالنغمات \ كما انحصرت الضروب بالراهات وتنقسم منها الأصوات وغيرها

[19] تستعمل نغمة : يستعمل نغمةً

[20] نغمة : النغمه

[21] أعلى : اعلا

[22] الثالث : الرابع

صفة الطبقة

علوى حد

رست

ساكاة

دوكاة

رمل

رست

ساكاة

دوكاة

رمل

رست

ساكاة

\دوكاة

رمل

رست

ساكاة

دوكاة

رمل

رست

ساكاة

دوكاة

رمل

رست

سُفلى ليّن

٢٨ ب \ فالرست هو الصوت اللابث المداد بما فيه من[23] الحدة والثقل
وهو النطق بزمن حرفين وما زاد عليهما أو بحرف ممدود بقدرهما أو
ما زاد عليهما أو ما حاكى ذلك فلذلك سمي بالصوت المداد
وكل نغمة بذاتها يمكن أن تكون رستا وتتميز بانتقالها إلى غيرها
فكل رست جواب لرست
وكل رست جاركاة لرست هو ثانيه من اللين
وكل دوكاة لرست بنجكاة لرست هو ثانيه[24] من اللين
وكل ساكاة لرست ششكاة لرست هو ثانيه من اللين
وكل رست ثالث لرست من الحدة رست رابع
وكل رست يتصور منه إلى رست هو ثانيه من الحدة نغم يسمى
بالزنكلا
٢٩ ا ويتصور من عكسه نغم يسمى رأس الهنك لأنه أول[25] \ أربعة أنغام
مطربة يشيل الأسفل إلى الأعلى ويحط الأعلى على الأسفل فسمي بذلك
لكن إذا أردت أن تصور رأس هنك من رست وتشتق منه هنكا
مطربا[26] يسمى بالعراق فتأخذ نغمة من ثالث رست من اللين
ونغمة من ساكاة تحته
ونغمة من دوكاة تحت الساكاة
ونغمة من رست تحت الدوكاة
ثم تعود فتأخذ نغمة من الرست الثالث ثانية فهذه النغمات الخمسة
هي رأس الهنك ولا يستعمل فيه [نغمة] الرمل التي بين الدوكاة والرست
الأخير من اللين في[27] هذا الصوت

[23] + من
[24] ثانيه : ثانية
[25] + لأنه أول
[26] هنكا مطربا : هنك مطرب
[27] في : من

ويحسن رأس الهنك بأنغام تنتج من رسوت فوقه

مثل عشاق نتج من فوقه

ومثل إصبهان يحط عليه نتج من رست فوقه

٢٩ ب ومثل إصبهان أيضا تنج من رست ثالث له من الحدة \ يحط على رست هو ثانيه من الحدة

إذا صورت ذلك فإن بإصبهان من رست هو ثانيه من الحدة يحط على رسته

ومثل دوكاة لرست هو ثانيه [من الحدة] شالت منه وحطت عليه

ومثل دوكاة لرست هو ثانيه من الحدة تكون بنجكاة له تحط على رست نتج منه

وبزنكلا نتجت من رست هو آخر محطه يشيل إلى رست نتج منه

لكن نغمة هذا الرست الذي هو آخر محطة رأس الهنك من اللين مشتركة بين محط رأس الهنك [وشيل زنكلا] (فيقوى عليها رأس الهنك) فلا تظهر للزنكلا قوة

فأت بعشاق من فوق رست رأس الهنك يحط على رست رأس الهنك

وأت برأس الهنك بعد ذلك

فصل

صوت الدوكاة

وهو نغمتان

نغمة من الرست

ونغمة من دوكاة فوقه

ويتميز هذا الصوت من الرمل الذي تحت الدوكاة

١٣٠ \ ثم بنغمة من الساكاة التي تحت الرست

ثم بنغمة من الدوكاة التي تحت الساكاة
ثم تعلو[28] فتأخذ نغمة من الدوكاة الأولة المبتدأ بها ثانية
ويتميز هذا الصوت أيضا إذا علوت من الرست إلى الدوكاة أن
تضيف[29] إليهما نغمة من ساكاة فوقهما
ونغمة من رست فوق الساكاة
ونغمة من دوكاة فوق ذلك الرست
ثم تحط بنغمة من رمل تحت الدوكاة
ونغمة من رست تحت الرمل
ونغمة من ساكاة تحت الرست
ثم تعود إلى نغمة دوكاتك الأولة
وتحسن[30] الدوكاة بإصبهان تحط عليها وبزركشي وبأبي سليك
معكوس في وضعه مبدأهما من رست ثالث لرست هذه الدوكاة من الحدة
يحطان[31] على الدوكاة
وكل دوكاة لرست من الرسوت الأربعة يتصور أن يكون منها هنك
٣٠ ب أبي سليك \ لكن لا ينبغي أن يُصوّر أبوسليك إلا من دوكاة الرست الثالث
من اللين وهنك الماياه من دوكاة الرست الرابع من اللين فإنها علوه[32] ولا
يتصور أن يكون هذا الهنك وعلوه من دوكاة رست آخر[33]
وهذا يدل على فساد ما قالته العجم إن العراق أنتج الماياه وأبا سليك

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[28] تعلو : تعلوا
[29] تضيف : يضيف
[30] تحسن : يحس
[31] يحطان : يحطا
[32] علوه : علويه
[33] آخر : واحد

فصل

صوت الساكاة

وهو ثلاث نغمات
[نغمة] من رست
ونغمة من دوكاة فوقه
ونغمة من ساكاة فوقهما
فمتى حطيتهما على رست شالت منه كانت حسينيا فتخالطها بإصبهان نتج من رست فوقها وتحط بيتها[34]
فإذا أردت بعد ذلك أن تهبط بها محطها على ساكاة رست آخر من تحت رستها فتكون خالطت الإصبهان وحطت على حجازي
ومتى لم تخالطها بالإصبهان فتكون ساكاة فقط ويعلو[35] هذا
١٣١ الصوت \ بما فوقه من الأصوات وبحصار إصبهان ناقص من فوقه يسمى البستاه يأتي الكلام عليه في موضعه

فصل

(صوت الجركاة)

وهو تسع نغمات
نغمة من رست
ونغمة من رست هو ثانيه من الحدة
ثم نغمة من رمل فوقه
ثم نغمة من رست تحت الرمل
ثم نغمة من الرمل ثانية
ثم بأربع نغمات

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[34] بيتها : سبها
[35] يعلو : يعلوا

نغمة من الرست الذي علوت إليه
ونغمة من ساكاة تحته
ونغمة من دوكاة تحت الساكاة
ونغمة من الرست السفلي الذي بدأت منه
[وتارة تزاد] بأربع نغمات
نغمة من رست ثالث لرست بدأت منه من الحدة
ونغمة من دوكاة تحته
ونغمة من رمل تحت الدوكاة
ونغمة من رست تحت الرمل وهو الرست الثاني بيت الجاركاة
ويسمى النكاري إذا استعملت نغمة من الرمل فوق الرست الثالث
٣١ ب بعد استعمالك نغمة[36] \ من الرست الثالث
ثم تهبط من النغمات إلى الجاركاة

ويحسن هذا الصوت بحجازي تصوره له من فوقه تجعل رستك العلوي بيت جاركاة رستك السفلي ساكاة والرمل الذي فوقه رستا[37] ودوكاته رملا[38] وساكاته دوكاة والرست الثالث الذي فوق الرست الثاني للرست الذي بدأت منه ساكاة فيكون الحجازي هاهنا مقدرا[39] من رست الى رست أعلى[40] منه رستان قدرتهما ساكاتان[41] وهذا الحجازي يقع علو الزنكلا

واحترز[42] أن تنقلب الجاركاة زنكلا فالفرق بين الجاركاة وبين الزنكلا لأن الجاركاة تشيل نغمة من رست ونغمة من رست آخر تعلوه والزنكلا

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[36] استعمالك نغمة : استعمالهِ نعمةٌ
[37] رستا : رست
[38] رملا : رمل
[39] مقدرا : مقدر
[40] أعلى : اعلا
[41] ساكاتان : ساكتان
[42] احترز : اخترز

١٣٢ تشيل نغمة من رست ونغمة من دوكاة فوقه ونغمة من ساكاة \ فوقهما
ونغمة من رست فوق ذلك فبين الرستين[43] نغمتان تستعملان في الزنكلا ولا
تستعملان في الجاركاة إذا علوت إلى الرست الثاني من الأول فافترقا بذلك
واشتركا في نغمتين[44] نغمة من رست ونغمة من رست تعلوه
ونغمة من الرمل التي فوق الرست العلوي من حقوق الجاركاة لا من
حقوق الزنكلا فهما مشتبهان مفترقان

فصل

صوت البنجكاة

وهو خمس نغمات
نغمة من الدوكاة
ونغمة من رست تحتها
ونغمة من ساكاة تحت الرست
ونغمة من دوكاة تحت الساكاة
ونغمة من رست تحت الدوكاة فهذه البنجكاة
وتحسن البنجكاة بحجازي وتأتي صفته في الفصل الذي بعد هذا

فصل

(صوت) الششكاة

والششكاة ست نغمات
نغمة من ساكاة
٣٢ ب ونغمة من دوكاة \ تحتها
ونغمة من رست تحت الدوكاة

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[43] الرستين : الرستان

[44] نغمتين : نغمتان

ونغمة من ساكاة تحت الرست
ونغمة من دوكاة تحت الساكاة
ونغمة من رست تحت الدوكاة فهذه الششكاة
وتحسن الششكاة بالبنجكاة[45] وأيضا بحجازي من فوقهما بقدر
البنجكاة ساكاة والششكاة رست والرست الذي فوقهما رمل والرمل الذي
فوق الرست دوكاة والدوكاة التي فوق الرمل ساكاة
فيكون الحجازي هاهنا من دوكاتين[46] قدرتهما ساكاتان

فصل

في الهفتكاة

وأما الهفتكاة فصوت مركب عشاق على بنجكاة
وهو أن يُصوّر رستا دوكاة
والساكاة التي تحته رملا[47]
والدوكاة التي تحت الساكاة رستا
ثم ترتفع فيصور الرمل الذي فوق الرست المصور دوكاة ساكاة
ويصور الدوكاة التي فوق الرمل رستا
ثم يأتي بالعشاق \ من دوكاة كانت رستا ١٣٣
يرتفع إلى رست كان دوكاة يحط على رست كان دوكاة أيضا
ثم تجعل هذه الدوكاة التي جعلتها رستا حط عليه العشاق بنجكاة
لرست أسفل من رستها

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[45] بالبنجكاة : والبنجكاه
[46] دوكاتين : دوكاتان
[47] رملا : رمل

فصل

في هنك العراق

وهو تسع نغمات

تأخذ نغمة من الرست الثالث من اللين وهو الرست الذي يتصور منه
شيل رأس الهنك

ونغمة من ساكاة تحته

ونغمة من دوكاة تحتهما ثم تكرر ذلك ثانيا

ثم تستعمل نغمة الساكاة التي استعملتها

ثم نغمة من الرست الذي بدأت به

ثم ترتفع فتستعمل نغمة دوكاة فوق رست بدأت به

فلذلك سمي العراق ثاني هنك لأنك إذا صوّرت رأس الهنك من
رست وصورت العراق من ذلك الرست ترتفع آخر العراق إلى دوكاة

ويحط العراق على حجازي طرفه من اللين أول ساكاة من أول
٣٣ ب \ الطبقة من اللين إذا تصورت رأس الهنك والعراق من الرست الثالث من اللين

ويحسن العراق بماياه من دوكاة الرست الرابع يحط على أبي سليك
نتج من دوكاة الرست الثالث

ويحسن بزركشي وبأبي سليك منعكس في وضعه ويأتي الكلام
عليه وعلى الزركشي في فصلين متواليين[48]

ويحسن أيضا بهنك زيلكند من فوقه لأن أول الزيلكند آخر هنك
العراق من الحدة

ويحسن أيضا بعلوات من فوقه إلى آخر الطبقة

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[48] متواليين : متوالين

فصل

هنك زيلكند

وهو ست نغمات ونصف نغمة

تبتدئ بنغمة من دوكاة هي آخر نغمات العراق من الحدة فلذلك هو ثالث لرأس الهنك لأن آخر علو العراق دوكاة فوق رست رأس الهنك وأول شيل الزيلكند هذه الدوكاة[49]

ثم نغمة من ساكاة فوق \ الدوكاة ١٣٤

ثم نغمة من رست فوق ذلك

ثم تأخذ نصف نغمة من رمل فوق الرست

وقولنا نصف نغمة بمعنى العدول عن حدة النغمة من غير هبوط إلى نغمة تجاورها من اللين

ثم تهبط بنغمة من الرست الذي تحت الرمل

ثم بنغمة من الساكاة التي تحت الرست

ثم بنغمة من الدوكاة التي بدأت بها لهذا الهنك فمن دوكاة تشرع وإليها ترجع

ويحسن هذا الهنك بحصار من فوقه وتأتي صفته

ويحط على العراق كما شال العراق إليه

ويحط على حجازي لأن البزرك كامن من تحته

ويحط على البزرك إذا ارتفع الحجازي عنه

فصل

هنك الإصبهان

وهو تسع نغمات

نغمة من رست ثان لرست رأس الهنك من الحدة

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[49] + ثم نعمة من ساكاه فوق الدوكاه

ونغمة من رمل فوقه
ونغمة من دوكاة فوق الرمل
ثم نغمة من الدوكاة ثانية
ثم تهبط بنغمة من الرمل الذي استعملته
٣٤ ب \ثم نغمة من الرست الذي تحت الرمل
ثم نغمة من الساكاة التي تحت الرست
ثم نغمة من الدوكاة التي تحت الساكاة
ثم نغمة من الرست الذي تحت الدوكاة فهذا آخر محط الإصبهان

وهو الرست الذي يتصور منه شيل رأس الهنك وتصور العراق منه وارتفع إلى آخر العراق إلى دوكاته وتصور الزيلكند من دوكاته إلى [نصف] الرمل الذي فوق الرست الثاني منه من الحدة[50] وتصور منه شيل الإصبهان إلى الدوكاة التي فوق [نصف] الرمل الذي هو نهاية علو الزيلكند

فدخلت نغمات الزيلكند ورأس العراق بين رست رأس الهنك وبين آخر علو الإصبهان فدل على أنه هنك رابع لرأس الهنك

فالعراق ثاني (رأس) الهنك والزيلكند ثالث والإصبهان[51] رابع خلافا[52] للعجم لأنهم قد جعلوا \ الإصبهان ثالثا والزيلكند رابعا وهو خطأ

وللإصبهان[53] محطات
المحط الكامل أن يحط على رست
وتارة يحط على دوكاة ذلك الرست
وتارة يحط على ساكاة ذلك الرست ويسمى الإصبهان البستاه
وتارة يحط على بيت شال منه
وتارة يحط على رمل فوق رست شال منه

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[50] + والرست الثاني منه من الحدة
[51] الإصبهان : الاصفهان
[52] خلافا : خلاف
[53] للإصبهان : الاصبهان

وتارة يحط على دوكاة هي آخر نهايته في العلو
ويحسن الإصبهان بحصار من فوقه وتأتي صفته

فصل

في حصار الزيلكند

وأما حصار الزيلكند فهي ساكاة رست مقدرة من أعلى[54] نغمات الزيلكند[55] من الرمل
يقدر الرمل رستا
والدوكاة التي فوقه رملا
والساكاة التي فوقهما دوكاة
والرست الذي فوق ذلك ساكاة
فتأخذ[56] نغمةً من \ الرست المقدر ٣٥ ب
ونغمة من دوكاته
ونغمة من ساكاة فوقهما فهذا هو حصار الزيلكند
وتارة تأتي من فوق هذه الساكاة التي هي حصار الزيلكند بزيلكند آخر ناقص من شيله يحط على الزيلكند الأول

فصل

في حصار الإصبهان البستاه

والإصبهان البستاه إصبهان ناقص عن محطه بنغمتين وهما الرست والدوكاة
وهذا الحصار ساكاة أيضا من فوق الإصبهان

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[54] أعلى : اعلا
[55] + وهي ساكاه رست مقدره من اعلا ىغمات الرىلكند
[56] فتأخذ : فياخد

ساكاة مقدرة

ورست مقدّر

فيأخذ بعد محط الإصبهان على الساكاة نغمةً من الدوكاة التي هي أصل آخر علو الإصبهان بقدرها رستا

وتجعل الساكاة التي فوق هذه الدوكاة رملا

ويجعل الرست الذي فوق الساكاة دوكاة

ويجعل الرمل الذي فوق الرست ساكاة فهذا حصار الإصبهان[57] وهو ساكاة مرتفعة عن محلها

١٣٦ ويحسن \ حصار الإصبهان بإصبهان آخر من فوقه مقدّر ويحط على الساكاة التي قدرتها من فوق الإصبهان الأول

فصل

في الفرق بين حصار الإصبهان وبين حصار الزيلكند

وإن كان كل من الحصارين ساكاة مقدرة فإن حصار الزيلكند من رمل قدرتها رستا

وفوق ذلك دوكاة قدرتها رملا

وفوق الدوكاة ساكاة قدرتها دوكاة

[و]فوق الساكاة رست قدرته ساكاة

وأما حصار الإصبهان فساكاة[58] مقدرة من دوكاة وهي آخر علو الإصبهان قدرتها رستا

وقدرت الساكاة التي فوق الدوكاة رملا

وقدرت الرست الذي فوق الرست ساكاة

فلذلك إن حصار الإصبهان أعلى[59] من حصار الزيلكند في الطبقة

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[57] + باصبهان آخر (ثم شطبت بحبر أحمر)

[58] فساكاة : ساكاه

[59] أعلى : اعلا

فصل

هنك المایاه

وهو نغمتان
نغمة من دوكاة رابع \رست من اللين وتجعل لها زمنا ٣٦ ب
ونغمة من رست تحتها
وتحسن نغمة المایاه بحصارها وبالششكاة من فوقها
وتحط على أبي سليك والعراق من تحتها

فصل

صوت حصار المایاه

وهو خمس نغمات
نغمة من الدوكاة التي هي أول شيل المایاه
ونغمة من الساكاة التي فوقها
ونغمة من الرست الخامس من اللين
ثم يهبط بنغمة من الساكاة التي تحت الرست الخامس
ثم تهبط بنغمة من الدوكاة المبتدأ[60] بها وهي دوكاة الرست الرابع

فصل

في هنك أبي سليك

وهو خمس نغمات ونصف نغمة
نغمة من [الدوكاة التي فوق] الرست الثالث من اللين
ونصف نغمة من الساكاة التي فوقها
ثم يهبط بنغمة من الرست الذي تحتها

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[60] المبتدأ : المبدا

ثم يهبط بنغمة من الرست[61] الذي تحتها

ثم يشيل[62] بنغمة الى الدوكاة[63]

٣٧ ا ثم يهبط \ بنغمة من الرست الذي تحت الدوكاة وهو الرست الثاني
من اللين فهذا نغم [أبي سليك
ويحسن] أبوسليك بمولداته من آخر محطه وبالمايه من فوقه
وبعشاق يقدر له من بعضه أوله آخر محطه

فصل

هنك النوى

وهو مشتق من البعد لطوله وهو تسع نغمات
تبتدئ به بعد محط أبي سليك على ثاني رست من اللين من نغمة
دوكاة أول رست من اللين وهي ثالث نغمة من أول الطبقة من اللين
ثم نغمة من دوكاة ثاني رست من اللين
ثم نغمة من ثالث رست من اللين
ثم نغمة [من] دوكاة ثالث رست من اللين
ثم نغمة من رابع رست من اللين
ثم نغمة من دوكاة رابع رست من اللين
ثم نغمة من خامس رست من اللين
ثم نغمة من دوكاة خامس رست من اللين
٣٧ ب ثم نغمة من سادس رست وهو آخر \الطبقة من الحدة
وهو يشتمل على تسع نغمات أربع رسوت وخمس دوكات
فإذا انتهى آخره إلى نهاية الحدة وهو الرست السادس فأت بالعشاق
من الرست الثاني من اللين وهو الرست الذي حط عليه هنك أبي سليك فإنه

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[61] + بنغمه من الرست

[62] يشيل : يهبط

[63] + التى تحت الرست

جواب جوابه

لا يستعمل في هنك النوى نغمة ساكاة ولا نغمة رمل إلا إذا تولد من أبى سليك والنوى أنغام

فإن أبا سليك من علو إلى هبوط والنوى من هبوط إلى علو فكل منهما عكس الآخر فيتولد منهما أنغام

نغمة من دوكاة

ونغمة من رست فوقها

ونغمة من دوكاة فوق الرست

ونغمة من ساكاة فوق الدوكاة فهذا نغم مستقل

وتارة تأتي بهذه النغمات بكمالها وتزيد عليها نغمة من رست فوق الساكاة فهذا نغم مستقل

وتارة تأتي بهذه النغمات وتزيد عليها \ نغمة من الساكاة المستعملة ١٣٨

ثم نغمة من الرست الذي فوقها المستعمل

ثم تستعمل نغمة من رمل من فوق الرست الذي فوقها

ثم تهبط الى الدوكاة

وتارة تأتي[64] بنغمات من النوى وتهبط بنغمات من أبي سليك من غير استعمال ساكاة ولا رمل يقع علو الرهوي

فصل

هنك العشاق

وهو سبع نغمات ستة كاملة ونصف [نغمة][65] مكررة

فأوله نغمة من دوكاة

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[64] تاتي : ياتى

[65] هنا بقعة في الصفحة نتيجة لضرر .

ونغمة من ساكاة فوقها
ونصف نغمة من رست فوق ذلك
ثم تهبط بنغمة من الساكاة ثانية
ثم ترتفع بنصف نغمة من الرست ثانية
ثم تهبط بنغمة من الساكاة ثالثة
ثم تهبط بنغمة من الدوكاة المبتدأ بها
ثم تحط على نغمة من رست تحت الدوكاة
فهذه ست نغمات كاملة ونصف نغمة مكررة

٣٨ ب وسمي للعشاق عشاقا \ لتألفه ببعيد[66] لأنه إذا ارتفعت[67] آخر النوى إلى نهاية الحدة وهو الرست السادس فأت بالعشاق من الرست الثاني من اللين فإنه جواب جوابه

لكنه عشاق مقدر تجعل نغمة الرست الثاني من اللين دوكاة
والرمل الذي فوقها ساكاة
والدوكاه التي فوق الرمل رستا وهي ثاني دوكاة من اللين
وتقدر أول دوكاة من اللين رستا يحط عليه العشاق
والساكاة الأولة وهي رابع نغمة من اللين تقدرها رملا
فيكون العشاق هاهنا مبدأه من رست قدرته دوكاة وطرفاه دوكاتان[68] قدرتهما رستان

ومن هذا يظهر فساد ما قالته العجم إن الرست أنتج العشاق والزنكلا وأرادوا بالرست رأس الهنك فإن رأس الهنك أوله من رست إلى رست هو ثانيه من اللين

٣٩ ا والزنكلا أوله \ من الرست إلى رسته هو ثانيه من الحدة
والعشاق مبدأه من دوكاة بين رستين ترفع إلى الحدة وتحط على اللين

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[66] وهي كلمة تكاد تكون غير مقروءة
[67] ارتفعت : ارتفع
[68] دوكاتان : دوكتان

ولا يصح أن يكون مبدأ هذه الأنغام الثلاثة من مكان واحد فإذا تصور شيل العشاق من دوكاة رست ولم يأت به عقيب هنك أبي سليك فإنه يحسن بعشاق من دوكاة رست من فوقه

وبعشاق من دوكاة رست من تحته

وبزنكلا بين رست ثان لرست بدأ من دوكاة من اللين

وببنجكاة من دوكاة رست فوق رسته تحط على رسته ويأتي هذا النغم عقيب نغم أبي سليك[69] من بعض نغماته مقدرا[70]

فهذه الهنوك الثمانية التي كانت الروم المتقدمون يجعلونها أمهات[71] وهي دائرتان[72]

رأس الهنك والعراق والزنكلا والإصبهان دائرة
والمايه وأبوسليك والنوى والعشاق دائرة أخرى

٣٩ ب فأول \ الدائرة الواحدة رأس الهنك من اللين وأول الدائرة الأخرى الثانية هنك المايه من الحدة

ولها أسماء بالرومي

ابروطس[73] دفتارس[74] تريطوس[75] تاترطوس
بلايبروتوا[76] بلاي دفتاروا[77] باريس[78] بلاي تترتوا[79]

[69] أبي سليك : ابو سليك
[70] مقدرا : مقدر
[71] أمهات : امهاتاً
[72] دائرتان : دايرتين
[73] ابروطس : ابزوطس
[74] دفتارس : دقنارس
[75] تريطوس : بربطوس
[76] بلايبروتوا : بلانبرونوا
[77] بلاي دفتاروا : بلان دقتاروا
[78] باريس : ياريس
[79] بلاي تتراتوا : بلان تترتوا

وأما الباقون فيأتي ذكرهم ومن أين تصورهم ليظهر فساد ما قالته العجم إن أربعة أنتجت ثمانية وإن ستة كل واحد فرع من اثنين وليس ذلك بمتصور

فصل

في الزنكلا

وهو أربع نغمات

نغمة من الرست بزمن متمكن

ونغمة من دوكاة فوقه

ونغمة من ساكاة فوقهما

ونغمة من رست فوق ذلك الرست

وقد تقدم فساد ما قالته العجم بأنه نتج من رأس الهنك بل ينبغي
أن يكون رأس الهنك نتج بعده من الطبقة عند استنباط الأصوات منها فهو
مقدم \ على رأس الهنك باعتبار تقدمه في الاستنباط وينبغي أن يكون رأس ١٤٠
الهنك لأنه أول أربعة أصوات مطربة يشيل الأسفل إلى الأعلى ويحط الأعلى
على الأسفل وينبغي أن يسمى كل منهم هنكا باعتبار ذلك وهم زنكلا
حجازي عكبري سازكري وملاءمة هاؤلاء من الطبقة أحسن ملاءمة من
الدائرتين المقدم ذكرهما

فصل

صوت البزرك

وهو صوت كامن تحت الحجازي

وهو ثلاث نغمات

نغمة من دوكاة

ونغمة من رمل تحت الدوكاة

ونغمة من رست تحت الرمل

فهو بين ساكاتين من ساكاة تحت رست ومنتهاه في الحدة إلى ساكاة فوق دوكاة

ويحسن البزرك بالزيلكند ويحط[80] الزيلكند عليه إذا ارتفع الحجازي عنه

فصل

صوت الرهاوي

٤٠ ب وهو رأس الهنك هبط على الرمل \ نقص عن محطه

وصورته نغمة من رست

ونغمة من ساكاة تحته

ونغمة من دوكاة تحت الساكاة

ونغمة من رمل تحت الدوكاة[81]

لكن يقوى[82] هذا النغم بعد نهاية هبوطه إلى الرمل بثلاث نغمات أخر

نغمة من رست تصور شيله منه

ونغمة من ساكاة تحته

ونغمة من دوكاة تحت الساكاة

ويحسن هذا الصوت بحجازي من تحته وبحسيني من فوقه وبنغم يعرف بالمولد من فوقه ويحسن المولد به من تحته

قالت العجم إن الزيلكند أنتج البزرك والرهوي وليس ذلك بمتصور لأن الزيلكند أوله من دوكاة ثم يرتفع[83] إلى نصف رمل من الطبقة ثم يهبط

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80 + على (ثم شطبت بالحبر الأحمر)

81 + ٮحت الساكاه (ثم شطبت بالحبر الأحمر)

82 يقوى : ٮفوى

83 يرتفع : يرفع

إلى الدوكاة المبتدأ بها والبزرك أوله دوكاة من الحدة [وآخره رست من اللين والرهاوي أوله من الحدة] رست وآخره من اللين رمل وهذا يدل على أن
٤١ ا كلا منهم صوت \ يستقل بذاته[84]

فصل

صوت الحسيني

وهو خمسة عشر نغمة من الطبقة ليس فيها نغمة رمل وليس في الأصوات أكثر نغمات منه وهو أكثر نغمات من الإصبهان وأطول منه

وقالت العجم إن الإصبهان أنتج الحسيني والنوى وليس ذلك بصواب

وأما الحسيني فليس فيه نغمة رمل من الطبقة

وأما النوى فليس فيه أيضا نغمة رمل ولا ساكاة[85] من الطبقة

وأما الإصبهان فلا بد له من نغمة رمل من الطبقة وهي ثاني نغمة من أوله في العلو ولا بد له من نغمة ساكاة من الطبقة وهي سابع نغمة منه في الهبوط

وهذا يدل على أن كلا منهم صوت مستقل بذاته

فتركيب نغمات الحسيني

أوله نغمة من رست

ونغمة من دوكاة فوقه

ونغمة من ساكاة فوقهما

ثم نغمة من رست فوق ذلك

٤١ ب ثم يهبط بنغمة[86] \ من الساكاة المستعملة

ونغمة من الدوكاة التي تحتها

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[84] بذاته : بدايه

[85] + من ساكاه

[86] + بنغمة

ونغمة من الرست المبتدأ به
ثم يهبط بنغمة من ساكاة تحت الرست المبتدأ به
ثم بنغمة من دوكاة تحت الساكاة
ثم بنغمة من رست تحت ذلك
ثم يرتفع بنغمة من دوكاة فوق هذا الرست الذي هو آخره من اللين
ثم بنغمة من ساكاة فوق الدوكاة
ثم بنغمة من الرست فوق الساكاة وهو الرست المبتدأ به لأول هذا الصوت
ثم يهبط بنغمة من ساكاة تحت الرست
ثم بنغمة من دوكاه تحت الساكاة فهذه نغمات الحسيني وله ماياه تأتي صفته[87] في موضعها

فصل

صفة ماياه الحسيني
وهي نغمة من دوكاة رست فوق رست بدأ منه الحسيني
ونغمة من ساكاة هي ثالث الحسيني من أوله

فصل

١٤٢ في الفرق \ بين ماياه[88] أبي سليك وبين ماياه الحسيني
وهو ما ذكرناه أن ماياه أبي سليك نغمة من دوكاة ونغمة من رست تحت الدوكاة
وأما ماياه الحسيني فنغمة من دوكاة أيضا ونغمة من ساكاة تحت

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[87] صفته : صفتها
[88] ماياه : المایاه

الرست الذي[89] تحت الدوكاة فهذا أهبط من هذا بنغمة

فصل

في ذكر تركيب النغمات التي قالت العجم

إن ثم آوازات ستة نتجت من اثني عشر من كل أصلين فرع

فصل

في النيروز

الذي قالوا إنه آواز بين الرست والعراق فإنه نغم مركب
وصورة هذا التركيب أن تأخذ نغمة من رست فوق الساكاة
ونغمة من دوكاة فوق الرست
ثم تهبط بنغمة الدوكاة تجعلها بنجكاة (ناقصة عن محطها
تحط على دوكاة رست) لرست أسفل من رستها
فلو كانت هذه النغمات آوازا[90] بين رأس الهنك والعراق لكان أول
٤٢ ب هذا التركيب من دوكاة فإن آخر \ نغمات العراق من الحدة دوكاة فلا
يتصور أن يكون آوازا[91] كما قيل
فإذا ركبت هذا التركيب على مثله تبتدئ به من ساكاة رست أسفل
من رست ركبت هذا التركيب من ساكاته كان نغما يسمى المحير

---

[89] الذي : الىى
[90] آوازا : آواز
[91] آوازا : اوزاً

فصل

في الشهناز

الذي[92] قالت العجم إنه آواز بين الإصبهان والزيلكند فإنه نغم شواذي من بيوت الزيلكند

وهو أن تأخذ نصف نغمة من رمل وهو آخر علو الزيلكند

ونغمة من الرست الذي تحته

ثم نغمة من ساكاة تحت الرست

ثم تأخذ نغمة من الرست الذي استعملته ثانية

ثم تهبط إلى نغمة من الدوكاة التي أسفل من الرست

ثم تبتدئ بهنك زيلكند كامل من دوكاة حط عليها هذا النغم الشواذي[93]

وتارة تركب هذا النغم على مثله فلذلك أشكل عليهم لأنه نغم شواذي[94] من أعلى[95] بيوت الزيلكند من الرمل أتوا به \ من الدوكاة التي ١٤٣ هي آخر علو الإصبهان يحط على الساكاة التي هي ثاني نغمة من نغمات الزيلكند

ثم أتوا به بمثله أوله من الساكاة التي هي آخر محطه تحط على رست رأس الهنك فلا يتصور أن يكون آوازا[96] بين الإصبهان وبين الزيلكند لأن الزيلكند يحط على الدوكاة وهذا يحط على رست رأس الهنك

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[92] الذي : البى

[93] الشواذي : الشوارى

[94] شواذي : شوارى

[95] أعلى : اعلا

[96] آوازا : آواز

فصل

في السلمك

الذي قالت العجم إنه آواز بين العشاق والزنكلا وإنه جاركاة مقدرة من دوكاة وهي آخر علو الإصبهان من الحدة تقدر الدوكاة التي هي آخر علو الإصبهان من الحدة[97] رستا والساكاة التي فوقها رملا[98] تستعمله[99] مع الرست فتكون[100] الجاركاة هاهنا ناقصة عن شيلها بنغمة وهي الرست وناقصة عن محطها تحط على بيت شيلها

وقالت العجم إن العشاق \والزنكلا نتجا من رأس الهنك فلا يتصور ٤٣ ب
أن يكون هذا النغم آوازا بين العشاق والزنكلا لأنه يقع آخر الإصبهان من
الحدة ورأس الهنك آخر الإصبهان من اللين

فصل

في الكوشت

وأما الكوشت فإنه نغم مركب من ساكاة خالطت الإصبهان وحطت على بيتها فلا يتصور أن يكون آوازا بين البزرك والرهوي

فصل

في الزركشي

وأما الزركشي الذي قالت العجم إنه آواز بين النوى والحسيني فإنه مركب وهو على طريقتين

---

[97] + بقدر الدوكاه التى هي اخر علو الاصبهان

[98] رملا : رمل

[99] تستعمله : يستعمله

[100] فتكون : فيكون

إحداهما[101] أن تأخذ نغمة من دوكاة رست
ونغمة من رست ثالث لرست الدوكاة من الحدة
ثم تجعل نغمة الساكاة التي تحت الرست الثالث[102] رملا لا
تستعملها[103] ثم تهبط فتصور من دوكاة الرست الثاني الذي تحت الساكاة
١٤٤ التي جعلتها رملا إصبهانا ناقصا عن[104] شيله بنغمتين \ نغمة من رست
ونغمة من رمل فوقه
ثم تهبط بالإصبهان إلى دوكاة الرست الأول الذي بدأت منه من
اللين

فصل

وتارة يكون أبا سليك[105] معكوسا في وضعه
وهو أن تأخذ نغمة من دوكاة
ونغمة من الرست الثالث لرست الدوكاة من الحدة تقدرها[106] دوكاة
ونغمة من الرمل الذي فوق الرست الثالث تقدرها ساكاة وتستعمل
نصفها
وتجعل الساكاتين اللتين بين الثلاث رسوت رملا لا تستعملهما[107]
مع الرمل الذي فوق الرست الأوسط فيكون شيلك من دوكاة كانت رستا
وساكاة كانت رملا
ثم تهبط بنغمة من الدوكاة المقدرة المبتدأ بها

---

[101] إحداهما : احدهما
[102] الثالث : الثالثة
[103] تستعملها : يستعملها
[104] عن : من
[105] أبا سليك : ابو سليك
[106] تقدرها : يقدرها
[107] تستعملهما : يستعملهما

ثم تهبط بنغمة رست كانت دوكاة[108] الرست الأوسط

ثم يحط على رست هو دوكاة الرست الأول من اللين

٤٤ ب \ فيكون هذا النغم معكوسا في وضعه فإن أباسليك يشيل من دوكاة يحط على رست وهذا يشيل من رست في الطبقة قدرته دوكاة يحط على دوكاة من الطبقة جعلتها رستا ولا يتصور أن يكون آوازا كما قيل

فصل

في الكردانيا

وهو نغم مركب أيضا ومنهم من جعله آوازا عوضا عن الزركشي وكل منهما خطأ فإنه جاركاة على رهوي وبنجكاة ناقصة عن محطها

فصورة هذا التركيب أن تأتي بالجاركاة ناقصة زائدة

ناقصة عن شيلها بنغمة من رست

زائدة بنغمتين نغمة من دوكاة ونغمة من ساكاة فوقها بعد استعمال نغمة من رست فوق ذلك

فتأتي بنغمة من رست

ونغمة من دوكاة لرست تحت هذا الرست

ثم نغمة من ساكاة فوق الدوكاة

ثم نغمة من رست ابتدأت به

٤٥ ا \ ثم نغمة من الرمل الذي فوقه

ثم تهبط بأربع نغمات أولها من رست ابتدأت به وآخرها من اللين تحط على رست وتجعل نغمة هذا الرست الذي حطت عليه وهذه الجاركاة أول رهوي

فإذا هبط الرهوي إلى الرمل فأت بنغمة من دوكاة رست حطت عليه الجاركاة واجعلها بنجكاة ناقصة عن محطها تحط على دوكاة فوق الرمل

---

[108] دوكاة : دوكات

الذي هو آخر الرهوي من اللين

فصل

في الحجازي

وهو ثمان نغمات

وقد جعلته العجم آوازا[109] بين المايه وبين أبي سليك[110] وقد تقدم بأن المايه من دوكاة رست وأباسليك من دوكاة رست تحته

والحجازي مبدأه من ساكاة وانتهاؤه[111] إلى ساكاة فوقها فلا يصح ما قالته العجم فيه

وتركيب هذا الصوت

نغمة من ساكاة

ونغمة من رست فوقها

ونغمة من دوكاة فوق الرست

ونغمة من \ ساكاة فوق الدوكاة ٤٥ ب

[ثم نغمة من الساكاة ثانية]

ثم تهبط بنغمة الدوكاة المستعملة

ثم تهبط بنغمة الرست الذي تحت الدوكاة

ثم يحط على نغمة [الساكاة] المبتدأ بها

فهذا تركيب النغمات التي قالوا بأنها آوازات

---

[109] آوازا : آواز

[110] أبي سليك : أبو سليك

[111] انتهاؤه : انتهاه

فصل

في العكبري

وهو ثلاثة نغمات

أوله نغمة من الدوكاة المستعملة في الحجازي

ونغمة من الساكاة التي فوق الدوكاة وهي آخر الحجازي في العلو

ونغمة من الرست الذي فوق الساكاة

فصل

في السازكري

وأما السازكري فهو خمس نغمات

نغمة من رست هو آخر علو العكبري

ونغمة من الرمل فوقه

ونغمة من دوكاة فوق الرمل

ثم تهبط بنغمة من الرمل المستعمل

ثم تحط على نغمة الرست الذي بدأت منه

ويحط[112] السازكري على الحجازي من الساكاة التي هي آخره من الحدة إلى الساكاة التي هي أوله من اللين

١٤٦ يحسن \ السازكري بعشاق يقدر له ناقص عن[113] شيله ومحطه أوله من أول الدوكاة التي هي آخر علو السازكري

ونغمة من رمل تحتها

ونغمة من الرست الذي تحت الرمل الذي هو أول السازكري

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[112] + على

[113] عن : من

فصل

صوت الرمل

وهو ست نغمات
نغمة من رست
ونغمة من رمل فوقه
ثم نغمة من الرمل ثانية
ثم نغمة من الرست الذي ابتدأت به
ثم نغمة من الساكاة التي تحت الرست
ثم نغمة من الدوكاة التي تحت الساكاة فهذا صوت الرمل
ويحسن الرمل بالساكاة وبالحجازي من فوقه مقدرا وقد تقدم تقديره

فصل

في الجاركاة

وهذا الحجازي المقدر مما يحسن به الرمل والجاركاة والزنكلا

فصل

في النغم الصعيدي

وهو مركب أبوسليك ناقص على[114] أبي سليك ناقص
٤٦ ب وهو \أن تنقص من نغمات أبي سليك نغمتين من آخره
نغمة من الرست الذي هو آخر محطه
ونغمة من دوكاة
ثم تبتدئ بمثله من هذه الدوكاة تحط على رست تحتها
فيبقى أبوسليكين ناقصين من بيوت أبي سليك واحد

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114 + أن

وتارة تزيد[115] كلا منهما نغمة في آخره وهي الدوكاة

فصل

[الزاولي]

وأما الزاولي فساكاة تحط على دوكاة تحتها بعد نهاية العمل

[المبرقع]

وكذلك المبرقع فإنه جاركاة ويحط على ساكاة بعد نهاية العمل

أما الشواذات والمركبات فكثير يظهر تركيبها لمن يعلم قسمة الطبقة ومن أين مأخذ الأصوات منها والسلام[116]

ولم أذكر الإيقاع لـ[ـعدم] ضرورتي إليه في علم النغم الذي[117]
مقصودي بيانه لكنه لما كان بعض السلف نقل عنه أنه يقيم الأصوات إلى
الثقيل \ الأول وإلى غيره كما تقدم علمت أن النفس الفاضلة ربما تشوقت ١٤٧
إلى معرفة ذلك فذكرته ورتبته ترتيبا لا يحتاج مع معرفته إلى غيره بسبب
ذلك وليكن هذا الكتاب مع صغر حجمه كاملا[118] في فنه لا يحتاج إلى غيره

والله يوفق للصواب بفضله
وهذا آخر الكتاب
وهو حسبنا ونعم الوكيل

[115] تزيد : يزيد

[116] السلام : السلم

[117] + هو

[118] كاملا : كامل